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<210> 4822

<211> 195

<212> PRT

<213> Homo sapiens

<400> 4822

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Lys	Pro	Val	Val	Lys	Leu	Leu	His	Asn	Arg	Ser	Asn	Asn	Lys	Tyr	Ser
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<210> 4823

<211> 1984

<212> DNA

<213> Homo sapiens

<400> 4823

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 1984

<210> 4824

<211> 547

<212> PRT

<213> Homo sapiens

<400> 4824

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Asp	Lys	Asn	Ser	Gly	Thr	Gly	Glu	Lys	Lys	Gly	Pro	Asn	Arg	Asn	Arg
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	50				55					60					
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65				70				75					80		
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			85					90					95		
Asp	Glu	Glu	Phe	Val	Lys	Lys	Ala	Leu	Glu	Thr	Met	Asn	Lys	Tyr	Asp
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Ala	Arg	Arg	Ala	Leu	Gln	Arg	Thr	Gly	Gly	Ser	Phe	Pro	Gly	Gly	His
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Val	Pro	Asp	Met	Gly	Ser	Gly	Leu	Met	Asn	Leu	Pro	Pro	Ser	Ile	Leu
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Met Asn Arg Ile Gly Gly Ile Gly Phe Gly Gly Leu Glu Ala Met		
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Asn Ser Met Gly Gly Phe Gly Gly Val Gly Arg Met Gly Glu Leu Tyr		
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Ile Gly Ile Asn Arg Ala Phe Gly Asp Ser Phe Gly Arg Leu Gly Ser		
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Ala Met Ile Gly Gly Ile Thr Gly Arg Ile Gly Ser Ser Asn Met Gly		
385	390	395
Pro Val Gly Ser Gly Ile Ser Gly Gly Met Gly Ser Met Asn Ser Val		
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Thr Gly Gly Met Gly Met Gly Leu Asp Arg Met Ser Ser Ser Phe Asp		
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Arg Met Gly Pro Gly Ile Gly Ala Ile Leu Glu Arg Ser Ile Asp Met		
435	440	445
Asp Arg Gly Phe Leu Ser Gly Pro Met Gly Ser Gly Met Arg Glu Arg		
450	455	460
Ile Gly Ser Lys Gly Asn Gln Ile Phe Val Arg Asn Leu Pro Phe Asp		
465	470	475
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485	490	495
Met Phe Ala Glu Ile Lys Met Glu Asn Gly Lys Ser Lys Gly Cys Gly		
500	505	510
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<210> 4825

<211> 2380

<212> DNA

<213> Homo sapiens

<400> 4825

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180

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<211> 105

<212> PRT

<213> Homo sapiens

<400> 4826

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Ser	Met	Lys	Arg	Gly	Leu	Asp	Val	Gln	Met	Glu	Thr	Cys	Arg	Arg	Leu
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Ile	Thr	Gln	Ser	Gly	Asp	Arg	Lys	Ser	Pro	Ala	Phe	Thr	Ala	Val	Pro
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Leu	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Ala	Glu	Asp	Ser	Asp	Arg
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<211> 6277

<212> DNA

<213> Homo sapiens

<400> 4827

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<211> 1322

<212> PRT

<213> Homo sapiens

<400> 4828

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<212> DNA

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Gly Ser Val Val Ile Ser Val Asn Pro Tyr Arg Ser Leu Pro Ile Tyr
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Ser Pro Glu Lys Val Glu Glu Tyr Arg Asn Arg Asn Phe Tyr Glu Leu
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Ser Pro His Ile Phe Ala Leu Ser Asp Glu Ala Tyr Arg Ser Leu Arg
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Asp Gln Asp Lys Asp Gln Cys Ile Leu Ile Thr Gly Glu Ser Gly Ala
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Gly Lys Thr Glu Ala Ser Lys Leu Val Met Ser Tyr Val Ala Ala Val
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Cys Gly Lys Gly Ala Glu Val Asn Gln Val Lys Glu Gln Leu Leu Gln
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Ser Asn Pro Val Leu Glu Ala Phe Gly Asn Ala Lys Thr Val Arg Asn
      145          150          155          160
Asp Asn Ser Ser Arg Phe Gly Lys Tyr Met Asp Ile Glu Phe Asp Phe
      165          170          175
Lys Gly Asp Pro Leu Gly Gly Val Ile Ser Asn Tyr Leu Leu Glu Lys
      180          185          190
Ser Arg Val Val Lys Gln Pro Arg Gly Glu Arg Asn Phe His Val Phe
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Tyr Gln Leu Leu Ser Gly Ala Ser Glu Glu Leu Leu Asn Lys Leu Lys
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Leu Glu Arg Asp Phe Ser Arg Tyr Asn Tyr Leu Ser Leu Asp Ser Ala
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Lys Val Asn Gly Val Asp Asp Ala Ala Asn Phe Arg Thr Val Arg Asn
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Glu Arg Ala Phe Ser Phe Arg Thr Val Glu Ala Lys Gln Glu Lys Val
      325          330          335
Ser Thr Thr Leu Asn Val Ala Gln Ala Tyr Tyr Ala Arg Asp Ala Leu
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Asn Glu Ser Ile Lys Ala Gln Thr Lys Val Arg Lys Lys Val Met Gly

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Glu Leu Thr Leu Lys Glu Glu Gln Glu Tyr Ile Arg Glu Asp Ile		415
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Glu Trp Thr His Ile Asp Tyr Phe Asn Asn Ala Ile Ile Cys Asp Leu		430
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Ile Glu Asn Asn Thr Asn Gly Ile Leu Ala Met Leu Asp Glu Glu Cys		445
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Leu Arg Pro Gly Thr Val Thr Asp Glu Thr Phe Leu Glu Lys Leu Asn		460
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Gln Val Cys Ala Thr His Gln His Phe Glu Ser Arg Met Ser Lys Cys		475
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 Ile Asp Cys Leu Met Lys Thr Ala Arg Ala Glu Gly Phe Phe Gly Met
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 Tyr Arg Gly Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala
 65 70 75 80
 Ile Lys Leu Ala Ala Asn Asp Phe Phe Arg Arg Leu Leu Met Glu Asp
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 Gly Met Gln Arg Asn Leu Lys Met Glu Met Leu Ala Gly Cys Gly Ala
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 4836

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His	Met	Tyr	Gln	Leu	His	Lys	Ala	Phe	Ala	Arg	Ala	Glu	Leu	Glu	Arg
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Thr	Tyr	Gln	Glu	Ile	Gln	Glu	Leu	Gln	Trp	Glu	Ile	Gln	Asn	Thr	Ser
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His	Leu	Ala	Val	Asp	Gly	Asp	Arg	Ala	Ala	Ala	Trp	Pro	Val	Gly	Ile
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Pro	Ala	Pro	Ser	Arg	Pro	Ala	Ser	Arg	Phe	Glu	Val	Leu	Arg	Trp	Asp
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Tyr	Phe	Thr	Glu	Gln	His	Ala	Phe	Ser	Cys	Ala	Asp	Gly	Ser	Pro	Arg

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Cys	Pro	Leu	Arg	Gly	Ala	Asp	Arg	Ala	Asp	Val	Ala	Asp	Val	Leu
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Thr	Ala	Leu	Glu	Glu	Leu	Asn	Arg	Arg	Tyr	His	Pro	Ala	Leu	Arg
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Gln	Lys	Gln	Gln	Leu	Val	Asn	Gly	Tyr	Arg	Arg	Phe	Asp	Pro	Ala
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Gly	Gly	Arg	Arg	Pro	Leu	Thr	Arg	Arg	Val	Gln	Leu	Leu	Arg	Pro
						165					170			175
Ser	Arg	Val	Glu	Ile	Leu	Pro	Val	Pro	Tyr	Val	Thr	Glu	Ala	Ser
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Leu	Thr	Val	Leu	Leu	Pro	Leu	Ala	Ala	Glu	Arg	Asp	Leu	Ala	Pro
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Gly	Phe	Leu	Glu	Ala	Phe	Ala	Thr	Ala	Ala	Leu	Glu	Pro	Gly	Asp
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Arg	Val	Ala	His	Ala	Asp	Val	Phe	Ala	Pro	Val	Lys	Ala	His	Val
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Glu	Leu	Glu	Arg	Arg	Phe	Pro	Gly	Ala	Arg	Val	Pro	Trp	Leu	Ser
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Gln	Thr	Ala	Ala	Pro	Ser	Pro	Leu	Arg	Leu	Met	Asp	Leu	Leu	Ser
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Lys	His	Pro	Leu	Asp	Thr	Leu	Phe	Leu	Leu	Ala	Gly	Pro	Asp	Thr
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Leu	Thr	Pro	Asp	Phe	Leu	Asn	Arg	Cys	Arg	Met	His	Ala	Ile	Ser
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Trp	Gln	Ala	Phe	Phe	Pro	Met	His	Phe	Gln	Ala	Phe	His	Pro	Ala
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<211> 906

<212> DNA

<213> Homo sapiens

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300

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<210> 4838

<211> 302

<212> PRT

<213> Homo sapiens

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		210				215						220		
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Arg	Gly	Thr	Pro	Ser	Pro	Ser	Pro	Tyr	Val	Ser	Pro	Arg	His	Ser
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<210> 4839

<211> 1313

<212> DNA

<213> Homo sapiens

<400> 4839

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<210> 4841
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<212> PRT

<213> Homo sapiens

<400> 4842

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 35 40 45
 His Ala Leu Ile Phe Cys Arg Gln Gln Gly Phe Ser Leu Glu Gln Thr
 50 55 60
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 65 70 75 80
 His Ile His Val Leu Arg Ala Tyr Ile Lys Thr Gln Val Asn Lys Glu
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<212> DNA

<213> Homo sapiens

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<211> 1675

<212> PRT

<213> Homo sapiens

<400> 4844

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<211> 3286

<212> DNA

<213> Homo sapiens

<400> 4845

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<211> 626

<212> PRT

<213> Homo sapiens

<400> 4846

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Lys	Tyr	Glu	Asp	Val	Glu	His	Lys	Val	Thr	Thr	Val	Phe	Gly	Gln
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<212> DNA

<213> Homo sapiens

<400> 4847

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<211> 242

<212> PRT

<213> Homo sapiens

<400> 4848

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<212> DNA

<213> Homo sapiens

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<210> 4850

<211> 90

<212> PRT

<213> Homo sapiens

<400> 4850

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			20					25					30		
Gln	Glu	Arg	Gly	Ser	Ala	His	Leu	Val	Ala	Leu	Lys	Cys	Ile	Pro	Lys
			35				40					45			
Lys	Ala	Leu	Arg	Gly	Lys	Glu	Ala	Leu	Val	Glu	Asn	Glu	Ile	Ala	Val
			50			55				60					
Leu	Arg	Arg	Ile	Ser	His	Pro	Asn	Ile	Val	Ala	Leu	Glu	Asp	Val	His
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Glu	Ser	Pro	Ser	His	Leu	Tyr	Leu	Ala	Met						
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<210> 4851

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4851

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 360
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 480
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 720
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<210> 4852

<211> 207

<212> PRT

<213> Homo sapiens

<400> 4852

Met	Ser	Cys	Thr	Ile	Glu	Lys	Ile	Leu	Thr	Asp	Ala	Lys	Thr	Leu	Leu
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		20					25						30		
Ser	Ala	Ala	Leu	His	Arg	Arg	Val	Ala	Ala	Met	Arg	Glu	Ala	Gly	Thr
		35					40						45		
Ala	Leu	Pro	Asp	Gln	Tyr	Gln	Glu	Asp	Ala	Ser	Asp	Met	Lys	Asp	Met
		50				55					60				
Ser	Lys	Tyr	Lys	Pro	His	Ile	Leu	Leu	Ser	Gln	Glu	Asn	Thr	Gln	Ile
65					70				75					80	
Arg	Asp	Leu	Gln	Gln	Glu	Asn	Arg	Glu	Leu	Trp	Ile	Ser	Leu	Glu	Glu
			85					90						95	
His	Gln	Asp	Ala	Leu	Glu	Leu	Ile	Met	Ser	Lys	Tyr	Arg	Lys	Gln	Met
		100						105					110		
Leu	Gln	Leu	Met	Val	Ala	Lys	Lys	Ala	Val	Asp	Ala	Glu	Pro	Val	Leu
		115					120						125		
Lys	Ala	His	Gln	Ser	His	Ser	Ala	Glu	Ile	Glu	Ser	Gln	Ile	Asp	Arg
		130					135						140		
Ile	Cys	Glu	Met	Gly	Glu	Val	Met	Arg	Lys	Ala	Val	Gln	Val	Asp	Asp
145					150				155					160	
Asp	Gln	Phe	Cys	Lys	Ile	Gln	Glu	Lys	Leu	Ala	Gln	Leu	Glu	Leu	Glu
			165					170						175	
Asn	Lys	Glu	Leu	Arg	Glu	Leu	Leu	Ser	Ile	Ser	Ser	Glu	Ser	Leu	Gln
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Ala	Arg	Lys	Glu	Asn	Ser	Met	Asp	Thr	Ala	Ser	Gln	Ala	Ile	Lys	
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<210> 4853

<211> 1467

<212> DNA

<213> Homo sapiens

<400> 4853

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<210> 4854

<211> 311

<212> PRT

<213> Homo sapiens

<400> 4854

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Glu Asn Pro Glu Gln Val Ala Ser Glu Gly Leu Pro Glu Pro Val Leu			
35	40	45	
Arg Lys Val Glu Leu Pro Val Pro Thr His Arg Arg Pro Val Gln Ala			
50	55	60	
Trp Val Glu Ser Leu Arg Gly Phe Glu Gln Glu Arg Val Gly Leu Ala			
65	70	75	80
Asp Leu His Pro Asp Val Phe Ala Thr Ala Pro Arg Leu Asp Ile Leu			
85	90	95	
His Gln Val Ala Met Trp Gln Lys Asn Phe Lys Arg Ile Ser Tyr Ala			
100	105	110	
Lys Thr Lys Thr Arg Ala Glu Val Arg Gly Gly Gly Arg Lys Pro Xaa			
115	120	125	
Ala Ala Glu Arg His Trp Ala Gly Pro Ala Trp Gln His Pro Leu Ser			
130	135	140	
Ala Leu Ala Arg Arg Arg Cys Cys Pro Trp Pro Pro Gly Pro Thr Ser			
145	150	155	160
Tyr Tyr Tyr Met Leu Pro Met Lys Val Arg Ala Leu Gly Leu Lys Val			
165	170	175	
Ala Leu Thr Val Lys Leu Ala Gln Asp Asp Leu His Ile Met Asp Ser			
180	185	190	
Leu Glu Leu Pro Thr Gly Asp Pro Gln Tyr Leu Thr Glu Leu Ala His			
195	200	205	
Tyr Arg Arg Trp Gly Asp Ser Val Leu Leu Val Asp Leu Thr His Glu			
210	215	220	
Glu Met Pro Gln Ser Ile Val Glu Ala Thr Ser Arg Leu Lys Thr Phe			
225	230	235	240
Asn Leu Ile Pro Ala Val Gly Leu Asn Val His Ser Met Leu Lys His			
245	250	255	
Gln Thr Leu Val Leu Thr Leu Pro Thr Val Ala Phe Leu Glu Asp Lys			
260	265	270	
Leu Leu Trp Gln Asp Ser Arg Tyr Arg Pro Leu Tyr Pro Phe Ser Leu			
275	280	285	
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290	295	300	
Ala Ala Thr Pro Tyr His Cys			
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<210> 4855

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4855

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240

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<210> 4856

<211> 237

<212> PRT

<213> Homo sapiens

<400> 4856

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Ala	Thr	Ala	Ala	Pro	Ala	Gly	Gly	Phe	Gly	Gly	Phe	Gly	Thr	Thr	Ser
		20					25				30				
Thr	Thr	Ala	Gly	Ser	Ala	Phe	Ser	Phe	Ser	Ala	Pro	Thr	Asn	Thr	Gly
	35				40					45					
Thr	Thr	Gly	Leu	Phe	Gly	Gly	Thr	Gln	Asn	Lys	Gly	Phe	Gly	Phe	Gly
	50				55					60					
Thr	Gly	Phe	Gly	Thr	Thr	Gly	Thr	Ser	Thr	Gly	Leu	Gly	Thr	Gly	
65			70					75					80		
Leu	Gly	Thr	Gly	Leu	Gly	Phe	Gly	Gly	Phe	Asn	Thr	Gln	Gln	Gln	Gln
		85						90					95		
Gln	Gln	Thr	Thr	Leu	Gly	Gly	Leu	Phe	Ser	Gln	Pro	Thr	Gln	Ala	Pro
		100					105						110		
Thr	Gln	Ser	Asn	Gln	Leu	Ile	Asn	Thr	Ala	Ser	Ala	Leu	Ser	Ala	Pro
	115					120						125			
Thr	Leu	Leu	Gly	Asp	Glu	Arg	Asp	Ala	Ile	Leu	Ala	Lys	Trp	Asn	Gln
	130				135						140				
Leu	Gln	Ala	Phe	Trp	Gly	Thr	Gly	Lys	Gly	Tyr	Phe	Asn	Asn	Asn	Ile
145			150					155						160	
Pro	Pro	Val	Glu	Phe	Thr	Gln	Glu	Asn	Pro	Phe	Cys	Arg	Phe	Lys	Ala
		165						170					175		
Val	Gly	Tyr	Ser	Cys	Met	Pro	Ser	Asn	Lys	Asp	Glu	Asp	Gly	Leu	Val
	180						185						190		
Val	Leu	Val	Phe	Asn	Lys	Lys	Glu	Thr	Glu	Ile	Arg	Ser	Gln	Gln	Gln
	195					200						205			
Gln	Leu	Val	Glu	Ser	Leu	His	Lys	Val	Leu	Gly	Gly	Asn	Gln	Thr	Leu
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225

230

235

<210> 4857

<211> 2887

<212> DNA

<213> Homo sapiens

<400> 4857

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180

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240

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300

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360

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420

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480

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540

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780

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900

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960

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<210> 4858

<211> 269

<212> PRT

<213> Homo sapiens

<400> 4858

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 Gln Ala Lys Glu Lys Glu Ile Glu Glu Leu Lys Ser Glu Arg Asp Thr
 50 55 60
 Leu Leu Ala Arg Ile Glu Arg Met Glu Arg Arg Met Gln Leu Val Lys
 65 70 75 80
 Lys Asp Asn Glu Lys Glu Arg His Lys Leu Phe Gln Gly Tyr Glu Thr
 85 90 95
 Glu Glu Arg Glu Glu Thr Glu Leu Ser Glu Lys Ile Lys Leu Glu Cys
 100 105 110
 Gln Pro Glu Leu Ser Glu Thr Ser Gln Thr Leu Pro Pro Lys Pro Phe
 115 120 125
 Ser Cys Gly Arg Ser Gly Lys Gly His Lys Arg Lys Ser Pro Phe Gly
 130 135 140
 Ser Thr Glu Arg Lys Thr Pro Val Lys Lys Leu Ala Pro Glu Phe Ser
 145 150 155 160
 Lys Val Lys Thr Lys Thr Pro Lys His Ser Pro Ile Lys Glu Glu Pro
 165 170 175
 Cys Gly Ser Leu Ser Glu Thr Val Cys Lys Arg Glu Leu Arg Ser Gln
 180 185 190
 Glu Thr Pro Glu Lys Pro Arg Ser Ser Val Asp Thr Pro Pro Arg Leu
 195 200 205
 Ser Thr Pro Gln Lys Gly Pro Ser Thr His Pro Lys Glu Lys Ala Phe
 210 215 220
 Ser Ser Glu Ile Glu Asp Leu Pro Tyr Leu Ser Thr Thr Glu Met Tyr
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<210> 4859

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4859

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<210> 4860

<211> 173

<212> PRT

<213> Homo sapiens

<400> 4860

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Trp	Thr	Leu	Asp	Leu	Glu	Pro	Arg	Gly	Pro	Val	His	Ile	His	Pro	Thr
		20						25					30		
Arg	Val	Ser	Gly	Gly	Leu	Pro	Arg	Cys	Leu	Cys	Trp	Val	Ala	Val	Val
	35						40				45				
Val	Pro	Arg	Gly	Met	Glu	Cys	Pro	Gly	Leu	Leu	Gln	Glu	Leu	Ser	Thr
	50					55					60				
Gln	Gly	Gln	Gly	Glu	Pro	Arg	Glu	Lys	Arg	Pro	Gly	Leu	Leu	Ser	Phe
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Leu	Ile	Cys	Ser	Cys	Pro	Pro	Leu	Ser	Ser	Thr	Pro	Leu	Pro	Phe	Pro
			85						90					95	
Arg	Leu	Ser	Pro	Pro	Trp	Ala	Phe	Val	Cys	Phe	Gly	Arg	Cys	His	Leu
		100						105					110		
Thr	Arg	Thr	Leu	Ile	Phe	Asn	Pro	Ile	Pro	Leu	Pro	Pro	Thr	Leu	Pro
		115					120					125			
His	Phe	Asp	Leu	Ile	Leu	Trp	Leu	Trp	Ala	Glu	Ala	Ser	Gln	Gly	Ser
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Trp	Val	Gly	Trp	Val	Leu	Arg	Pro	Pro	Gln	Thr	Ser	Thr	Glu	Thr	Cys
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<210> 4861

<211> 1622

<212> DNA

<213> Homo sapiens

<400> 4861

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420
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480
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540
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1500
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1620
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1622

<210> 4862
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 4862

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 1              5              10              15
Gly Tyr Leu Lys Leu Val Cys Val Ser Phe Gln Arg Gln Gly Phe His
      20              25              30
Thr Val Gly Ser Arg Cys Lys Asn Arg Thr Gly Ala Glu His Leu Trp
      35              40              45
Leu Thr Arg His Leu Arg Asp Pro Phe Val Lys Ala Ala Lys Val Glu
      50              55              60
Ser Tyr Arg Cys Arg Ser Ala Phe Lys Leu Leu Glu Val Asn Glu Arg
      65              70              75              80
His Gln Ile Leu Arg Pro Gly Leu Arg Val Leu Asp Cys Gly Ala Ala
      85              90              95
Pro Gly Ala Trp Ser Gln Val Ala Val Gln Lys Val Asn Ala Ala Gly
      100             105             110
Thr Asp Pro Ser Ser Pro Val Gly Phe Val Leu Gly Val Asp Leu Leu
      115             120             125
His Ile Phe Pro Leu Glu Gly Ala Thr Phe Leu Cys Pro Ala Asp Val
      130             135             140
Thr Asp Pro Arg Thr Ser Gln Arg Ile Leu Glu Val Leu Pro Gly Arg
      145             150             155             160
Arg Ala Asp Val Ile Leu Ser Asp Met Ala Pro Asn Ala Thr Gly Phe
      165             170             175
Arg Asp Leu Asp His Asp Arg Leu Ile Ser Leu Cys Leu Thr Leu Leu
      180             185             190
Ser Val Thr Pro Asp Ile Leu Gln Pro Gly Gly Thr Phe Leu Cys Lys
      195             200             205
Thr Trp Ala Gly Ser Gln Ser Arg Arg Leu Gln Arg Arg Leu Thr Glu
      210             215             220
Glu Phe Gln Asn Val Arg Ile Ile Lys Pro Glu Ala Ser Arg Lys Glu
      225             230             235             240
Ser Ser Glu Val Tyr Phe Leu Ala Thr Gln Tyr His Gly Arg Lys Gly
      245             250             255
Thr Val Lys Gln
      260
  
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<210> 4863
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 4863

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120
accatcaacc ctgaggacga cacggatcct ggccatgctg acctggtcct ctatatcact
180
  
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aggtttgacc tggagttgcc tgatggtaac ncggcagtcg ggggcgtcac ccagctgggc
 240
 ggggcctgct ccccaacctg gagctgcctc attaccgagg acactggctt cgacctggga
 300
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 355

<210> 4864
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 4864
 Leu Gly Ala His Phe Arg Val His Leu Val Lys Met Val Ile Leu Thr
 1 5 10 15
 Glu Pro Glu Gly Ala Pro Asn Ile Thr Ala Asn Leu Thr Ser Ser Leu
 20 25 30
 Leu Ser Val Cys Gly Trp Ser Gln Thr Ile Asn Pro Glu Asp Asp Thr
 35 40 45
 Asp Pro Gly His Ala Asp Leu Val Leu Tyr Ile Thr Arg Phe Asp Leu
 50 55 60
 Glu Leu Pro Asp Gly Asn Xaa Ala Val Arg Gly Val Thr Gln Leu Gly
 65 70 75 80
 Gly Ala Cys Ser Pro Thr Trp Ser Cys Leu Ile Thr Glu Asp Thr Gly
 85 90 95
 Phe Asp Leu Gly Val Thr Ile Ala His Glu Ile Gly His Ser Phe Gly
 100 105 110
 Leu Glu His Asp Gly Ala
 115

<210> 4865
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 4865
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 120
 aaggccttcg ccgacagctc ttacctgctt cgccaccagc gcactcactc tggccagaag
 180
 ccctacaagt gcccacattg tggcaaggcc ttcggcgaca gctcctacct cctgcgacac
 240
 cagcgacccc acagccacga gcggccctac agctgcaccg agtgcggcaa gtgctatagc
 300
 cagaactcgt ccctgcgcag ccacagagg gtgcacaccg gtcagaggcc cttcagctgt
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 420
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 444

<210> 4866

<211> 148
<212> PRT
<213> Homo sapiens

<400> 4866

Thr Gly Glu Lys Pro Tyr Lys Cys Glu Val Cys Ser Lys Ala Phe Ser
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Gln Ser Ser Asp Leu Ile Lys His Gln Arg Thr His Thr Gly Glu Arg
20 25 30
Pro Tyr Lys Cys Pro Arg Cys Gly Lys Ala Phe Ala Asp Ser Ser Tyr
35 40 45
Leu Leu Arg His Gln Arg Thr His Ser Gly Gln Lys Pro Tyr Lys Cys
50 55 60
Pro His Cys Gly Lys Ala Phe Gly Asp Ser Ser Tyr Leu Leu Arg His
65 70 75 80
Gln Arg Thr His Ser His Glu Arg Pro Tyr Ser Cys Thr Glu Cys Gly
85 90 95
Lys Cys Tyr Ser Gln Asn Ser Ser Leu Arg Ser His Gln Arg Val His
100 105 110
Thr Gly Gln Arg Pro Phe Ser Cys Gly Ile Cys Gly Lys Ser Phe Ser
115 120 125
Gln Arg Ser Ala Leu Ile Pro His Ala Arg Ser His Ala Arg Glu Lys
130 135 140
Pro Phe Thr Arg
145

<210> 4867
<211> 391
<212> DNA
<213> Homo sapiens

<400> 4867

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120
ccttctccac atccccattc tggtaggaaa agtcacccat gccaggatat cccagccca
180
gagacagccc cagggggtgc tgctggaga cagccgggat agcttcagtc tctgaccct
240
gacacgggct gcaccaccag acaatgggca ttttcaggcc agactctggc acaaagagaa
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360
agcgtcttac tcctatagct cccactgta t
391

<210> 4868
<211> 125
<212> PRT
<213> Homo sapiens

<400> 4868

Met Gly Val Glu Arg Tyr Leu Leu His Pro Ser Gln Leu Leu Arg Ser

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      1           5           10           15
Leu Trp Ala Ile Ala Leu Ala Leu Pro Leu Leu Phe Val Pro Glu Ser
      20           25           30
Gly Leu Lys Met Pro Ile Val Trp Trp Cys Ser Pro Cys Gln Gly Gln
      35           40           45
Glu Thr Glu Ala Ile Pro Ala Val Ser Arg Gln His Pro Leu Gly Leu
      50           55           60
Ser Leu Gly Trp Gly Tyr Pro Gly Met Gly Asp Phe Ser Tyr Gln Asn
      65           70           75           80
Gly Asp Val Glu Lys Glu Ala Asp Val Pro Arg Leu Val Ala Ser Phe
      85           90           95
Cys Pro Ser His Pro Pro Thr Lys Asp Met Arg Leu Leu Pro Ser Asn
      100           105           110
Leu Leu Gly Ala Ser Pro Asp Arg Thr Pro Ser Gly Ile
      115           120           125

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<210> 4869

<211> 418

<212> DNA

<213> Homo sapiens

<400> 4869

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tggaactca atggtgttgc tacctttgga tggactcgga ggcagcccag cttcctggga
120
caggactgca cggactgcct ggggaggggt ctttggcccc cgggttcctg caggggggct
180
cggggaggcc ctgtgagcag ttggtcacag gtgggtccca ttcgatgca tctgttcct
240
ccccaacagc cctggagaag ggggacgttg cctgctgtgg ctgaggctgt tttcctggcc
300
tgtgagaggc ggggccagag tggccgttgg gaatctgggt gttgcaaggt gaccacaaac
360
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418

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<210> 4870

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4870

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Met Ala Met Gly Ile Gly Trp Glu Leu Asn Gly Val Ala Thr Phe Gly
      1           5           10           15
Trp Thr Arg Arg Gln Pro Ser Phe Leu Gly Gln Asp Cys Thr Asp Cys
      20           25           30
Leu Gly Arg Gly Leu Trp Pro Pro Gly Ser Cys Arg Gly Ala Arg Gly
      35           40           45
Gly Pro Val Ser Ser Trp Ser Gln Val Gly Pro Ile Arg Cys Asp Pro
      50           55           60
Val Pro Pro Gln Gln Pro Trp Arg Arg Gly Thr Leu Pro Ala Val Ala
      65           70           75           80
Ala Ala Val Phe Leu Ala Cys Glu Arg Arg Gly Gln Ser Gly Arg Trp

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	85		90		95
Glu Ser Gly Cys Cys Lys Val Thr Thr Asn Ser Ser Leu Gly Glu Glu					
	100		105		110
Glu Glu Asn Ala Ile Asp Phe Gln Glu Pro Ser Glu Val					
	115		120		125

<210> 4871

<211> 1354

<212> DNA

<213> Homo sapiens

<400> 4871

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120
cagccctca ggccatgctg ctgctcagct gcatggcaaa gtctgcaca tgctcctca
180
gagtctggcg ggcatctgcc tgtgcccgt tctccgtgc ccgtctctgc tgcagcttgg
240
tcagtctcaa ccgcagccgc tgctcccgcc gcttgaggc ctgcagctgg cgctgggct
300
tgtcaagggc atcaagggt gcttggtctg ccgtctccag agtaaggcgc tgcccacctg
360
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420
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480
ctgcagcctg cttcatctgc ctgggcaccc aaggggcccc gtaggtctga aaaggggctg
540
ctaaggccag gctccagcct ccagctggg gagggccgca aagtggcagg tgctgaggcc
600
tcttccacag gaaagcaggt gacatcagca ggtggaggtg gagaaaatgg agttgtgggc
660
cctggccct cggagcagcg cttctgcat cgtctaagcc ggctgacttc aggggggcca
720
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780
atggtgggga ctgccccctc ctttagcctg tgatatccac tgattccac cagctcaaag
840
cagtcctcct caaagtgttt ggagcagaag tagatgtact cggatgccgg gtcccacagg
900
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960
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1020
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1080
acctcctgc gaccccgccg ggtaagcacc accgcccggg cacagacgag gcaacggagg
1140
cctcgagaag aaaagcagtt tctcagcgt catctggcag gtaacagagt ggggcgggtc
1200
caagccggct agacttccg tctccctt cccgactgca ttcagtccg ccgggaccgt
1260

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tccgcttcac ctcccacca caggttcaag cctcctcagt atctgagaaa ggcgcgaagc
 1320
 ctctacgcag ttgcgacccg aggcgagcaa caac
 1354

<210> 4872

<211> 90

<212> PRT

<213> Homo sapiens

<400> 4872

Gly	Arg	Lys	Arg	Leu	Gln	Ser	Cys	Trp	Ala	Ala	Pro	Arg	Ser	Val	Gln
1				5					10					15	
Gln	Pro	Leu	Arg	Pro	Cys	Cys	Cys	Ser	Ala	Ala	Trp	Gln	Ser	Pro	Ala
			20					25					30		
His	Ala	Pro	Ser	Glu	Ser	Gly	Gly	His	Leu	Pro	Val	Pro	Ala	Ser	Pro
			35				40					45			
Val	Pro	Ala	Pro	Ala	Ala	Ala	Trp	Ser	Val	Ser	Thr	Ala	Ala	Ala	Ala
	50					55					60				
Pro	Ala	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Ala	Gly	Pro	Cys	Gln	Gly	His
65				70				75						80	
Gln	Gly	Leu	Pro	Gly	Ser	Pro	Leu	Pro	Glu						
				85				90							

<210> 4873

<211> 948

<212> DNA

<213> Homo sapiens

<400> 4873

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 120
 ccactgtgag ttgaactctt tcgtgttgac cggccactct ccgtgctctg gatgatgtcg
 180
 gaacacgacc tggccgatgt ggttcaaatt gcagtggaag acctgagccc tgaccaccca
 240
 ggtacagagc tgtgggacag tgttgttttg gagaatcatg tagtgacaga tgaagacgaa
 300
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 360
 ctgtattcca tcaaccagac aatctgcttg cggttgata gcattgaagc caaattgcaa
 420
 gccctggagg ctacttgtaa atccttagaa gaaaagctgg atctgggtcac gaacaagcag
 480
 cacagcccca tccaggttcc catggtggcc ggctccctc tcaggacaac ccagatgtgc
 540
 aacaaagtgc gatggtgaaga acagaccagg gtgccggggc cttcagggtca cttggggaga
 600
 agcgcgtcac ctctcgccc atgcccgag cttagtggct cagtttctg gagatgcgca
 660
 gtgtctgcct cagcagtctc agcagtttct aactaaagct gactttagtt agaccgaaac
 720

cgaacacatg gcatactgcc aggatgacct gaagtcaccc tcacctttcc ttccacata
 780
 aagccggccc atacaccttt tctttggaac taaccacca gatcttagaa gatgtacacg
 840
 tgcttctttc ctttttccta ctctacctgg ctagtcttta gatatgtttt tcttcgtatg
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 948

<210> 4874

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4874

Met	Met	Ser	Glu	His	Asp	Leu	Ala	Asp	Val	Val	Gln	Ile	Ala	Val	Glu
1				5					10					15	
Asp	Leu	Ser	Pro	Asp	His	Pro	Gly	Thr	Glu	Leu	Trp	Asp	Ser	Val	Val
			20					25					30		
Leu	Glu	Asn	His	Val	Val	Thr	Asp	Glu	Asp	Glu	Pro	Ala	Leu	Lys	Arg
		35					40					45			
Gln	Arg	Leu	Glu	Ile	Asn	Cys	Gln	Asp	Pro	Ser	Ile	Lys	Ser	Phe	Leu
	50					55					60				
Tyr	Ser	Ile	Asn	Gln	Thr	Ile	Cys	Leu	Arg	Leu	Asp	Ser	Ile	Glu	Ala
65				70					75					80	
Lys	Leu	Gln	Ala	Leu	Glu	Ala	Thr	Cys	Lys	Ser	Leu	Glu	Glu	Lys	Leu
			85					90					95		
Asp	Leu	Val	Thr	Asn	Lys	Gln	His	Ser	Pro	Ile	Gln	Val	Pro	Met	Val
			100					105					110		
Ala	Gly	Ser	Pro	Leu	Arg	Thr	Thr	Gln	Met	Cys	Asn	Lys	Val	Arg	Trp
		115					120						125		

<210> 4875

<211> 1255

<212> DNA

<213> Homo sapiens

<400> 4875

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 120
 tggacgcagt tttagaaaga gcgttttcgc tacgtaaagc acattcgata aaggatatgg
 180
 aaaatacttt gcagctgggtg agaaatatca tacctcctct gtcttccaca aagcacaag
 240
 ggcaagatgg aagaataggc gtagttggag gctgtcagga gtacactgga gcccattatt
 300
 ttgcagcaat ctacgtcttc aaagtgggag cagacttgct ccaagtgttc tgtgccagt
 360
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 420
 gccccaatgc tgttcattgag gtggagaagt ggctgccccg gctgcatgct cttgtcgtag
 480

gacctggcctt gggtagagat gatcggtccac ccagttcttg acagccccaa tgctgttcat
 540
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 600
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 660
 cctgttgtca tcgacgcgga tggcctgtgg ctggctgctc agcagccggc cctcatccat
 720
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 780
 gtgctcagag gccctatgga cagcgatgac agccatggat ctgtgctaag actcagccaa
 840
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 960
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 1020
 aatgggtcca gccctctcct ggtggccgcg tttgggcctt gctctctcac caggcagtgc
 1080
 aaccaccaag ccttcagaa gcacggctgc tccaccacca cctccgacat gatcgccgag
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 gtggggggcg ccttcagcaa gctctttgaa acctgagccc gcgcagacca gaagtaaaca
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 1255

<210> 4876

<211> 230

<212> PRT

<213> Homo sapiens

<400> 4876

Leu	Ala	Trp	Val	Glu	Met	Ile	Val	His	Pro	Val	Leu	Asp	Ser	Pro	Asn
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Ala	Val	His	Glu	Val	Glu	Lys	Trp	Leu	Pro	Arg	Leu	His	Ala	Leu	Val
			20					25					30		
Val	Gly	Thr	Gly	Leu	Gly	Arg	Asp	Asp	Ala	Leu	Leu	Arg	Asn	Val	Gln
			35				40					45			
Gly	Ile	Leu	Glu	Val	Ser	Lys	Ala	Arg	Asp	Ile	Pro	Val	Val	Ile	Asp
	50					55					60				
Ala	Asp	Gly	Leu	Trp	Leu	Val	Ala	Gln	Gln	Pro	Ala	Leu	Ile	His	Gly
65					70					75				80	
Tyr	Arg	Lys	Ala	Val	Leu	Thr	Pro	Asn	His	Val	Glu	Phe	Ser	Arg	Leu
			85					90						95	
Tyr	Asp	Ala	Val	Leu	Arg	Gly	Pro	Met	Asp	Ser	Asp	Asp	Ser	His	Gly
			100				105							110	
Ser	Val	Leu	Arg	Leu	Ser	Gln	Ala	Leu	Gly	Asn	Val	Thr	Val	Val	Gln
			115				120					125			
Lys	Gly	Glu	Arg	Asp	Ile	Leu	Ser	Asn	Gly	Gln	Gln	Val	Leu	Val	Cys
	130					135					140				
Ser	Gln	Glu	Gly	Ser	Ser	Arg	Arg	Cys	Gly	Gly	Gln	Gly	Asp	Leu	Leu
145					150				155					160	
Ser	Gly	Ser	Leu	Gly	Val	Leu	Val	His	Trp	Ala	Leu	Leu	Ala	Gly	Pro

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<210> 4877
<211> 1182
<212> DNA
<213> Homo sapiens
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4055

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1182

<210> 4878

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4878

Met	Ala	Val	Ser	His	Ser	Val	Lys	Glu	Arg	Thr	Ile	Ser	Glu	Asn	Ser
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Leu	Ile	Ile	Leu	Gln	Gly	Leu	Gln	Gly	Arg	Val	Thr	Thr	Val	Asp	
		20					25					30			
Leu	Arg	Asp	Glu	Ser	Val	Ala	His	Gly	Arg	Ile	Asp	Asn	Val	Asp	Ala
		35					40					45			
Phe	Met	Asn	Ile	Arg	Leu	Ala	Lys	Val	Thr	Tyr	Thr	Asp	Arg	Trp	Gly
	50					55					60				
His	Gln	Val	Lys	Leu	Asp	Asp	Leu	Phe	Val	Thr	Gly	Arg	Asn	Val	Arg
	65				70					75				80	
Tyr	Val	His	Ile	Pro	Asp	Asp	Val	Asn	Ile	Thr	Ser	Thr	Ile	Glu	Gln
			85						90					95	
Gln	Leu	Gln	Ile	Ile	His	Arg	Val	Arg	Asn	Phe	Gly	Gly	Lys	Gly	Gln
		100						105					110		
Gly	Arg	Trp	Glu	Phe	Pro	Pro	Lys	Lys	Leu						
		115					120								

<210> 4879

<211> 1941

<212> DNA

<213> Homo sapiens

<400> 4879

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120
gctgggcttg gaggatgcct ctccgaccca ctgatgctgg gggcgagga ctcggtcaag
180
ggaggggcaa gaggaggagg agagcctgcc gttccaactt gccatcaga gaccggaca
240
cggcctggtg tgtggcttgc tgctgggag ggatgcacag ggctcctga gggacaggat
300
ggacctggtc agaggacggt tgctgtctc atttgcttc caagaagagc atgtcctccc
360
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<210> 4880

<211> 202

<212> PRT

<213> Homo sapiens

<400> 4880

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Glu	Ala	Gly	Val	Ser	Val	Gly	Gly	Gly	Glu	Glu	Gly	Thr	Ser	Ala	Phe
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<210> 4881

<211> 1333

<212> DNA

<213> Homo sapiens

<400> 4881

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<210> 4882

<211> 100

<212> PRT

<213> Homo sapiens

<400> 4882

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			20					25					30		
Leu	Pro	Phe	Leu	Pro	Ser	Gln	Pro	Leu	Gly	Phe	Gly	Tyr	Met	Thr	Gln
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Gln	Leu	Met	Asn	Leu	Ala	Gly	Gly	Ala	Val	Val	Leu	Ala	Leu	Glu	Gly
		50				55				60					
Gly	His	Asp	Leu	Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val	Ala
65				70					75					80	
Ala	Leu	Leu	Gly	Asn	Arg	Val	Ser	Arg	Leu	Pro	Pro	Pro	Ser	Met	Leu
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<210> 4883

<211> 1371

<212> DNA

<213> Homo sapiens

<400> 4883

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<210> 4884<211> 410

<212> PRT

<213> Homo sapiens

<400> 4884

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		20						25					30		
Leu	Arg	Leu	Leu	Asn	Phe	Gln	His	Asn	Phe	Ile	Thr	Arg	Ile	Gln	Asn
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Ile Glu Glu Ile Ser Gly Leu Ser Thr Leu Arg Cys Leu Arg Val Leu
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Leu Leu Gly Lys Asn Arg Ile Lys Lys Ile Ser Asn Leu Glu Asn Leu
                      85                      90                      95
Lys Ser Leu Asp Val Leu Asp Leu His Gly Asn Gln Ile Thr Lys Ile
                      100                      105                      110
Glu Asn Ile Asn His Leu Cys Glu Leu Arg Val Leu Asn Leu Ala Arg
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Asn Phe Leu Ser His Val Asp Asn Leu Asn Gly Leu Asp Ser Leu Thr
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Glu Leu Asn Leu Arg His Asn Gln Ile Thr Phe Val Arg Asp Val Asp
145                      150                      155                      160
Asn Leu Pro Cys Leu Gln His Leu Phe Leu Ser Phe Asn Asn Ile Ser
                      165                      170                      175
Ser Phe Asp Ser Val Ser Cys Leu Ala Asp Ser Ser Ser Leu Ser Asp
                      180                      185                      190
Ile Thr Phe Asp Gly Asn Pro Ile Ala Gln Glu Ser Trp Tyr Lys His
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Thr Val Leu Gln Asn Met Met Gln Leu Arg Gln Leu Asp Met Lys Arg
210                      215                      220
Ile Thr Glu Glu Glu Arg Arg Met Ala Ser Val Leu Ala Lys Lys Glu
225                      230                      235                      240
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Lys Arg Leu Thr Ile Asn Asn Val Ala Arg Gln Trp Asp Leu Gln Gln
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Arg Val Ala Asn Ile Ala Thr Asn Glu Asp Arg Lys Asp Ser Asp Ser
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Pro Gln Asp Pro Cys Gln Ile Asp Gly Ser Thr Leu Ser Ala Phe Pro
290                      295                      300
Glu Glu Thr Gly Pro Leu Asp Ser Gly Leu Asn Asn Ala Leu Gln Gly
305                      310                      315                      320
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Val Gln Thr Ala Gly Met Ile Thr Thr Val Ser Phe Thr Phe Ile Glu
                      355                      360                      365
Phe Asp Glu Ile Val Gln Val Leu Pro Lys Leu Lys Ile Lys Phe Pro
370                      375                      380
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<210> 4885

<211> 489

<212> DNA

<213> Homo sapiens

<400> 4885

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<210> 4886

<211> 77

<212> PRT

<213> Homo sapiens

<400> 4886

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			20					25					30		
Val	Asn	Phe	Thr	Arg	Xaa	Glu	Trp	Arg	Glu	Leu	Asp	Leu	Ala	Gln	Arg
			35					40					45		
Val	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Arg	Asn	Leu	Val	Ser
			50					55					60		
Leu	Val	Gly	Phe	Pro	Phe	Ser	Lys	Pro	Gly	Ile	Ile	Ser			
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<210> 4887

<211> 2271

<212> DNA

<213> Homo sapiens

<400> 4887

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<210> 4888

<211> 429

<212> PRT

<213> Homo sapiens

<400> 4888

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		20						25				30			
Ser	Ala	His	Tyr	His	Val	Asn	Phe	Ser	Gln	Ala	Ile	Ser	Gln	Asp	Val
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Asn	Leu	His	Glu	Ala	Ile	Leu	Leu	Cys	Pro	Asn	Asn	Thr	Phe	Arg	Arg
	50					55					60				
Asp	Pro	Thr	Ala	Arg	Thr	Ser	Gln	Ser	Gln	Glu	Pro	Phe	Leu	Gln	Leu
65					70					75				80	
Asn	Ser	His	Thr	Thr	Asn	Pro	Glu	Gln	Thr	Leu	Pro	Gly	Thr	Asn	Leu
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Thr	Gly	Phe	Leu	Ser	Pro	Val	Asp	Asn	His	Met	Arg	Asn	Leu	Thr	Ser
			100					105					110		
Gln	Asp	Leu	Leu	Tyr	Asp	Leu	Asp	Ile	Asn	Ile	Phe	Asp	Glu	Ile	Asn
		115					120					125			
Leu	Met	Ser	Leu	Ala	Thr	Glu	Asp	Asn	Phe	Asp	Pro	Ile	Asp	Val	Ser
	130					135					140				
Gln	Leu	Phe	Asp	Glu	Pro	Asp	Ser	Asp	Ser	Gly	Leu	Ser	Leu	Asp	Ser
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Ser	His	Asn	Asn	Thr	Ser	Val	Ile	Lys	Ser	Asn	Ser	Ser	His	Ser	Val
			165					170					175		
Cys	Asp	Glu	Gly	Ala	Ile	Gly	Tyr	Cys	Thr	Asp	His	Glu	Ser	Ser	Ser
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 Ile Ile Leu Asn Leu Glu Asp Asp Val Cys Asn Leu Gln Ala Lys Lys
 340 345 350
 Glu Thr Leu Lys Arg Glu Gln Ala Gln Cys Asn Lys Ala Ile Asn Ile
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<210> 4889

<211> 619

<212> DNA

<213> Homo sapiens

<400> 4889

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<212> DNA

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<210> 4898

<211> 92

<212> PRT

<213> Homo sapiens

<400> 4898

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		20				25						30			
Ser	Ser	Trp	Asp	Tyr	Arg	Arg	Pro	Arg	Cys	Pro	Ala	Asn	Phe	Cys	
		35				40					45				
Ile	Phe	Ser	Lys	Asp	Arg	Val	Ser	Pro	Cys	Trp	Leu	Gly	Trp	Ser	Gln
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Thr	Pro	Asp	Xaa	Thr	Arg	Leu	Gly	Leu	Pro	Lys	Cys	Trp	Asp	Tyr	Arg
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<210> 4899

<211> 444

<212> DNA

<213> Homo sapiens

<400> 4899

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<210> 4900

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4900

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Arg Gln Gln Arg Gly Pro Leu Gly Trp Val Gly Val Leu Leu Asp Ser			
	35	40	45
Gly Gly Gly Glu His Leu Pro Phe Pro Gln Pro Cys Val His Pro Gln			
	50	55	60
Met Leu Leu Ala His Arg Ile Ser Gln Cys His Gly Pro Thr Thr Ala			
65	70	75	80
Arg Leu Gly Pro Val Ser Gly Gln His Pro Glu Gly Gln Gly Pro Ser			
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Val Leu Thr Lys Glu Ala Leu Gly Val Ala Val Pro Ala Pro Met Gly			
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Leu Leu Leu Gly Arg Gly			
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<210> 4901

<211> 1520

<212> DNA

<213> Homo sapiens

<400> 4901

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960

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<210> 4902

<211> 184

<212> PRT

<213> Homo sapiens

<400> 4902

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			20					25					30		
Leu	Val	Gly	Pro	Tyr	Gln	Asn	Thr	Ile	Gly	Ala	Ala	Phe	Val	Ala	Lys
			35				40					45			
Val	Met	Ser	Val	Gly	Asp	Arg	Thr	Val	Thr	Leu	Gly	Ile	Trp	Asp	Thr
	50				55					60					
Ala	Gly	Ser	Glu	Arg	Tyr	Glu	Ala	Met	Ser	Arg	Ile	Tyr	Tyr	Arg	Gly
65				70					75					80	
Ala	Lys	Ala	Ala	Ile	Val	Cys	Tyr	Asp	Leu	Thr	Asp	Ser	Ser	Ser	Phe
			85					90						95	
Glu	Arg	Ala	Lys	Phe	Trp	Val	Lys	Glu	Leu	Arg	Ser	Leu	Glu	Glu	Gly
			100				105						110		
Cys	Gln	Ile	Tyr	Leu	Cys	Gly	Thr	Lys	Ser	Asp	Leu	Leu	Glu	Glu	Asp
	115					120							125		
Arg	Arg	Arg	Arg	Val	Asp	Phe	His	Asp	Val	Gln	Asp	Tyr	Ala	Asp	
	130				135					140					
Ser	Ser	Cys	Ser	Ser	Ala	Leu	Trp	Gly	Val	Gly	Val	Cys	Gly	Cys	Leu
145				150					155					160	
Gly	Gly	Ser	Lys	Lys	Ile	Gly	Thr	Ala	Leu	Ala	Ala	Arg	Ala	Arg	Cys
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Ser	Arg	Arg	Ser	Ser	Trp	Pro	Pro								
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<210> 4903

<211> 1064

<212> DNA

<213> Homo sapiens

<400> 4903

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 180
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 780
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<210> 4904

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4904

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 20 25 30
 Asn Lys Gln Thr Ala Val Pro Val Gly Gly Leu Ser Arg Lys Lys Val
 35 40 45
 Pro Gln Glu Pro Trp Ala Thr Val Met Glu Lys Arg Leu Gln Glu Ala

50	55	60
Gln Leu Tyr Lys Glu Glu Gly Asn Gln Arg Tyr Arg Glu Gly Lys Tyr		
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Arg Asp Ala Val Ser Arg Tyr His Arg Ala Leu Leu Gln Leu Arg Gly		80
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Leu Asp Pro Xaa Ser Ala Leu Ser Val Thr		95
	100	105

<210> 4905
 <211> 615
 <212> DNA
 <213> Homo sapiens

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<210> 4906
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 4906
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 20 25 30
 Gln Leu Pro Trp Glu Ala Leu Gly Arg Leu Gly Asn Val Asn Thr Leu
 35 40 45
 Gly Leu Asp His Asn Leu Leu Ala Ser Val Pro Ala Gly Ala Phe Ser
 50 55 60
 Arg Leu His Lys Leu Ala Arg Leu Asp Met Thr Ser Asn Arg Leu Thr
 65 70 75 80
 Thr Ile Pro Pro Asp Pro Leu Phe Ser Arg Leu Pro Leu Leu Ala Arg

	85		90		95
Pro Arg Gly Ser	Pro Ala Ser Ala	Leu Val Leu Ala	Phe Gly Gly Asn		
	100		105		110
Pro Leu His Cys	Asn Cys Glu Leu	Val Trp Leu Arg	Arg Leu Ala Arg		
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<210> 4907

<211> 1748

<212> DNA

<213> Homo sapiens

<400> 4907

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<210> 4908
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 4908
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 Gly His Arg Arg Ala Ser Leu
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<210> 4909
 <211> 1960
 <212> DNA
 <213> Homo sapiens

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<210> 4910
 <211> 423
 <212> PRT
 <213> Homo sapiens

<400> 4910
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 35 40 45
 Ile Leu Ala His Gly Gly Val Arg Phe Met Trp Ile Lys His Asn Asn
 50 55 60
 Leu Tyr Leu Val Ala Thr Ser Lys Lys Asn Ala Cys Val Ser Leu Val
 65 70 75 80
 Phe Ser Phe Leu Tyr Lys Val Val Gln Val Phe Ser Glu Tyr Phe Lys
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 Glu Leu Glu Glu Glu Ser Ile Arg Asp Asn Phe Val Ile Ile Tyr Glu
 100 105 110
 Leu Leu Asp Glu Leu Met Asp Phe Gly Phe Pro Gln Thr Thr Asp Ser
 115 120 125
 Lys Ile Leu Gln Glu Tyr Ile Thr Gln Gln Ser Asn Lys Leu Glu Thr
 130 135 140
 Gly Lys Ser Arg Val Pro Pro Thr Val Thr Asn Ala Val Ser Trp Arg
 145 150 155 160
 Ser Glu Gly Ile Lys Tyr Lys Lys Asn Glu Val Phe Ile Asp Val Ile
 165 170 175
 Glu Ser Val Asn Leu Leu Val Asn Ala Asn Gly Ser Val Leu Leu Ser
 180 185 190
 Glu Ile Val Gly Thr Ile Lys Met Arg Val Phe Leu Ser Gly Met Pro
 195 200 205
 Glu Leu Arg Leu Gly Leu Asn Asp Lys Val Leu Phe Asp Asn Thr Gly
 210 215 220
 Arg Gly Lys Ser Lys Ser Val Glu Leu Glu Asp Val Lys Phe His Gln
 225 230 235 240
 Cys Val Arg Leu Ser Arg Phe Glu Asn Asp Arg Thr Ile Ser Phe Ile
 245 250 255
 Pro Pro Asp Gly Glu Phe Glu Leu Met Ser Tyr Arg Leu Asn Thr His
 260 265 270
 Val Lys Pro Leu Ile Trp Ile Glu Ser Val Ile Glu Lys Phe Ser His
 275 280 285
 Ser Arg Ile Glu Tyr Met Val Lys Ala Lys Gly Gln Phe Lys Lys Gln
 290 295 300
 Ser Val Ala Asn Gly Val Glu Ile Ser Val Pro Val Pro Ser Asp Ala
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 Asp Ser Pro Arg Phe Lys Thr Ser Val Gly Ser Ala Lys Tyr Val Pro
 325 330 335
 Glu Arg Asn Val Val Ile Trp Ser Ile Lys Ser Phe Pro Gly Gly Lys
 340 345 350
 Glu Tyr Leu Met Arg Ala His Phe Gly Leu Pro Ser Val Glu Lys Glu
 355 360 365
 Glu Val Glu Gly Arg Pro Pro Ile Gly Val Lys Phe Glu Ile Pro Tyr

370 375 380
 Phe Thr Val Ser Gly Ile Gln Val Arg Tyr Met Lys Ile Ile Glu Lys
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<210> 4911

<211> 1862

<212> DNA

<213> Homo sapiens

<400> 4911

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<210> 4912

<211> 453

<212> PRT

<213> Homo sapiens

<400> 4912

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		20						25					30		
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Glu	Val	Glu	Asp	Glu	Asn	Met	Val	Leu	Ala	Ser	Tyr	Lys	Gln	Gly	Tyr
	50				55					60					
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<210> 4913
<211> 2090
<212> DNA
<213> Homo sapiens
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<210> 4914

<211> 529

<212> PRT

<213> Homo sapiens

<400> 4914

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			20					25					30		
Asn	Pro	Asn	Pro	Leu	Ile	Asn	Val	Arg	Asp	Arg	Leu	Phe	His	Ala	Leu
		35					40					45			
Phe	Phe	Lys	Met	Ala	Val	Thr	Tyr	Ser	Arg	Leu	Phe	Pro	Pro	Ala	Phe
	50						55				60				
Arg	Arg	Leu	Phe	Glu	Phe	Val	Leu	Leu	Lys	Ala	Leu	Phe	Val	Leu	
65					70				75					80	
Phe	Val	Leu	Ala	Tyr	Ile	His	Ile	Val	Phe	Ser	Arg	Ser	Pro	Ile	Asn
				85					90					95	
Cys	Leu	Glu	His	Val	Arg	Asp	Lys	Trp	Pro	Arg	Glu	Gly	Ile	Leu	Arg
			100					105					110		
Val	Glu	Val	Arg	His	Asn	Ser	Ser	Arg	Ala	Pro	Val	Phe	Leu	Gln	Phe
		115					120					125			
Cys	Asp	Ser	Gly	Gly	Arg	Gly	Ser	Phe	Pro	Gly	Leu	Ala	Val	Glu	Pro
	130						135				140				
Gly	Ser	Asn	Leu	Asp	Met	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Leu	Thr	Met
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Lys	Val	Phe	Lys	Pro	Pro	Ser	Ser	Thr	Glu	Ala	Leu	Asn	Asp	Ser	Gln
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Tyr	Ile	Val	Glu	Tyr	Ser	Leu	Glu	Tyr	Gly	Phe	Leu	Arg	Leu	Ser	Gln
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			245						250					255	
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Leu	Ala	Ala	Phe	Ala	Ile	Met	Val	Ile	Phe	Thr	Leu	Ser	Val	Ser	Met
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Leu	Leu	Arg	Tyr	Ser	His	His	Gln	Ile	Phe	Val	Phe	Ile	Val	Asp	Leu
			325						330				335		
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370	375	380
Trp Leu Ala Asp Gln Tyr Asp Ala Ile Cys Cys His Thr Ser Thr Ser		
385	390	395
Lys Arg His Trp Leu Arg Phe Phe Tyr Leu Tyr His Phe Ala Phe Tyr		
405	410	415
Ala Tyr His Tyr Arg Phe Asn Gly Gln Tyr Ser Ser Leu Ala Leu Val		
420	425	430
Thr Ser Trp Leu Phe Ile Gln His Ser Met Ile Tyr Phe Phe His His		
435	440	445
Tyr Glu Leu Pro Ala Ile Leu Gln Gln Val Arg Ile Gln Glu Met Leu		
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Leu Gln Ala Pro Pro Leu Gly Pro Gly Thr Pro Thr Ala Leu Pro Asp		
465	470	475
Asp Met Asn Asn Asn Ser Gly Ala Pro Ala Thr Ala Pro Asp Ser Ala		
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Gly Gln Pro Pro Ala Leu Gly Pro Val Phe Glu Leu Val Ser Lys Glu		
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<210> 4915

<211> 1157

<212> DNA

<213> Homo sapiens

<400> 4915

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660

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<211> 59

<212> PRT

<213> Homo sapiens

<400> 4916

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			20					25					30		
Trp	Gly	Pro	Gly	Gly	Asp	Ala	Pro	Arg	Gly	Ser	Gly	Leu	Lys	Arg	Pro
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<212> DNA

<213> Homo sapiens

<400> 4917

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<210> 4918

<211> 347

<212> PRT

<213> Homo sapiens

<400> 4918

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 Ala Ala Gly Ala Gly Arg Gly Gly Ala Arg Ala Val Arg Val Asp Val
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 Arg Leu Pro Arg Gln Asp Ala Leu Val Leu Glu Gly Val Arg Ile Gly

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Asp	Val	Val	Asp	Ala	Glu	Gln	Glu	Ala	Pro	Ala	Asp	Gly	Trp	Ile	Ala
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Lys	Gly	Ser	Gly	Pro	Gln	Ala	Tyr	Pro	Lys	Ala	Leu	Val	Gln	Gln	Met
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Arg	Arg	Ala	Leu	Phe	Leu	Gly	Ala	Ser	Ala	Leu	Leu	Leu	Leu	Ile	Leu
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Asn	His	Asn	Val	Val	Arg	Glu	Leu	Asp	Ile	Ser	Gln	Leu	Leu	Leu	Arg
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Pro	Val	Ile	Val	Leu	His	Tyr	Ser	Ser	Asn	Val	Thr	Lys	Leu	Leu	Asp
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Ala	Ile	Leu	Leu	Val	Ala	Met	Leu	Leu	Cys	Thr	Gly	Leu	Val	Val	Gln
		260					265						270		
Ala	Gln	Arg	Gln	Ala	Ser	Arg	Gln	Ser	Gln	Arg	Glu	Leu	Gly	Gly	Gln
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Thr	Arg	Arg	Cys	Arg	Leu	Ser	Arg	Ala	Ala	Gln	Gly	Leu	Pro	Asp	Pro
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Gly	Ala	Glu	Thr	Cys	Ala	Val	Cys	Leu	Asp	Tyr	Phe	Cys	Asn	Lys	Gln
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<210> 4919

<211> 1362

<212> DNA

<213> Homo sapiens

<400> 4919

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120

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180

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240

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<211> 194

<212> PRT

<213> Homo sapiens

<400> 4920

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		20					25						30		
Phe	Val	Val	His	Thr	Val	Gln	Phe	Leu	Asn	Arg	Phe	Ser	Thr	Val	Cys
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Glu	Glu	Lys	Leu	Ala	Asp	Leu	Ser	Leu	Arg	Ile	Gln	Gln	Ile	Glu	Thr
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Thr	Leu	Asn	Ile	Leu	Asp	Ala	Lys	Leu	Ser	Ser	Ile	Pro	Gly	Leu	Asp
65				70					75					80	
Asp	Val	Thr	Val	Glu	Val	Ser	Pro	Leu	Asn	Val	Thr	Ser	Val	Thr	Asn
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<210> 4921

<211> 1272

<212> DNA

<213> Homo sapiens

<400> 4921

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<211> 342

<212> PRT

<213> Homo sapiens

<400> 4922

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Val	Glu	Gln	Lys	Cys	Glu	Val	Phe	Asp	Asp	Glu	Glu	Glu	Ser	Lys
		35				40					45			Leu
Thr	Tyr	Thr	Glu	Ile	His	Gln	Glu	Tyr	Lys	Glu	Leu	Val	Glu	Lys
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Glu	Ala	Cys	Thr	Ser	Pro	Leu	Ala	Lys	Thr	His	Thr	Ser	Gln	Ala
			85					90					95	Ile
Leu	Gln	Pro	Val	Leu	Ala	Ala	Glu	Asp	Phe	Thr	Ile	Phe	Lys	Ala
		100					105						110	Met
Met	Val	Gln	Lys	Asn	Ile	Glu	Met	Gln	Leu	Gln	Ala	Ile	Arg	Ile
	115					120					125			Ile
Gln	Glu	Arg	Asn	Gly	Val	Leu	Pro	Asp	Cys	Leu	Thr	Asp	Gly	Ser
	130			135						140				Asp
Val	Val	Ser	Asp	Leu	Glu	His	Glu	Glu	Met	Lys	Ile	Leu	Arg	Glu
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Leu	Arg	Lys	Ser	Lys	Glu	Glu	Tyr	Asp	Gln	Glu	Glu	Glu	Arg	Lys
			165					170					175	Arg
Lys	Lys	Gln	Leu	Ser	Glu	Ala	Lys	Thr	Glu	Glu	Pro	Thr	Val	His
		180					185						190	Ser
Ser	Glu	Ala	Ala	Ile	Met	Asn	Asn	Ser	Gln	Gly	Asp	Gly	Glu	His
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	210					215						220		Ile
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Gln	Lys	Gly	Leu	Lys	Ile	Pro	Gly	Leu	Glu	His	Ala	Ser	Ile	Glu
			245					250					255	Gly
Pro	Ile	Ala	Asn	Leu	Ser	Val	Leu	Gly	Thr	Glu	Glu	Leu	Arg	Gln
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Glu	His	Tyr	Leu	Lys	Gln	Lys	Arg	Asp	Lys	Leu	Met	Ser	Met	Arg
	275					280						285		Lys
Asp	Met	Arg	Thr	Lys	Gln	Ile	Gln	Asn	Met	Glu	Gln	Lys	Gly	Lys
														Pro

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 325 330 335
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 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Ser Ser Ser Ser Ser Ser Gly Ser Leu Met His Arg Leu Ala Ile Phe

50		55		60
Ser Met Ala Ser Ile Gly Lys Gly Pro Leu Pro Leu Ser Phe Ser Arg				
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Ala Gly Gly Trp Pro Pro Thr Lys Ala Lys Asn Ser Ala Ser Ser Ser				80
	85		90	95
Ser Ser Leu Ala Pro Ser Ser Gly Ile Ile Arg Pro Ser Gly Glu Arg				
	100		105	110
Ser Thr Ser Arg Pro Ser Trp Arg Ala Ala Ala Pro Leu Pro Gly				
	115		120	125
Gly Pro Gly Gly Pro Ser Ser Cys Ala Ser Ser Arg Leu Asp Ala Arg				
	130		135	140
Thr Thr Cys Pro Gln Ala Arg Pro Cys Pro Ala Pro Ser Pro Gly Ser				
145		150		155
Val Ala Ala His Ser Pro Phe Leu Ser Pro Ala Leu Leu Val Gly Ala				160
	165		170	175
Leu Arg Pro Val Asp Pro Glu Pro Ser Leu Pro Cys Leu Ala Val Pro				
	180		185	190
Leu Pro Pro Arg Ala Ser Gly Ala Ala Ala Pro Xaa Ser Ala Ala Ser				
	195		200	205
Trp Ala Arg Arg Gly Leu Pro Ser Arg Asn Tyr Asn Ser Arg Gln Ile				
	210		215	220
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225		230		235
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<212> DNA

<213> Homo sapiens

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<211> 124

<212> PRT

<213> Homo sapiens

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Lys Asp Glu Glu Asp Gly Lys Asp Ser Asp Glu Ala Glu Asp Ala Glu			
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Leu Tyr Asp Asp Leu Tyr Cys Pro Ala Cys Asp Lys Ser Phe Lys Thr			
	50	55	60
Glu Lys Ala Met Lys Asn His Glu Lys Ser Lys Lys His Arg Glu Met			
	65	70	75
Val Ala Leu Leu Lys Gln Gln Leu Glu Glu Glu Glu Asn Phe Ser			
	85	90	95
Arg Pro Gln Ile Asp Glu Asn Pro Leu Asp Asp Asn Ser Glu Glu Glu			
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<210> 4927

<211> 1649

<212> DNA

<213> Homo sapiens

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<211> 405

<212> PRT

<213> Homo sapiens

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Leu	Thr	Asp	Phe	Cys	Thr	His	Leu	Pro	Asn	Leu	Pro	Asp	Ser	Thr	Ala
65					70					75				80	
Lys	Glu	Ile	Tyr	His	Phe	Thr	Leu	Glu	Lys	Ile	Gln	Pro	Arg	Val	Ile
			85						90					95	
Ser	Phe	Glu	Glu	Gln	Val	Ala	Ser	Ile	Arg	Gln	His	Leu	Ala	Ser	Ile
			100						105					110	
Tyr	Glu	Lys	Glu	Glu	Asp	Trp	Arg	Asn	Ala	Ala	Gln	Val	Leu	Val	Gly
		115						120				125			
Ile	Pro	Leu	Glu	Thr	Gly	Gln	Lys	Gln	Tyr	Asn	Val	Asp	Tyr	Lys	Leu
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<211> 648

<212> PRT

<213> Homo sapiens

<400> 4930

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			20					25					30		
Val	Gln	Gln	Phe	Gly	Tyr	Gln	Arg	Arg	Ala	Ser	Asp	Asp	Gly	Lys	Leu
	35						40					45			
Thr	Asp	Pro	Ser	Lys	Thr	Ser	Asn	Thr	Ile	Arg	Val	Phe	Leu	Pro	Asn
	50					55					60				
Lys	Gln	Arg	Thr	Val	Val	Asn	Val	Arg	Asn	Gly	Met	Ser	Leu	His	Asp
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Cys	Leu	Met	Lys	Ala	Leu	Lys	Val	Arg	Gly	Leu	Gln	Pro	Glu	Cys	Cys
			85						90					95	
Ala	Val	Phe	Arg	Leu	Leu	His	Glu	His	Lys	Gly	Lys	Lys	Ala	Arg	Leu
			100						105				110		
Asp	Trp	Asn	Thr	Asp	Ala	Ala	Ser	Leu	Ile	Gly	Glu	Glu	Leu	Gln	Val
		115					120					125			
Asp	Phe	Leu	Asp	His	Val	Pro	Leu	Thr	Thr	His	Asn	Phe	Ala	Arg	Lys
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Thr	Phe	Leu	Lys	Leu	Ala	Phe	Cys	Asp	Ile	Cys	Gln	Lys	Phe	Leu	Leu
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Asn	Gly	Phe	Arg	Cys	Gln	Thr	Cys	Gly	Tyr	Lys	Phe	His	Glu	His	Cys
			165						170					175	
Ser	Thr	Lys	Val	Pro	Thr	Met	Cys	Val	Asp	Trp	Ser	Asn	Ile	Arg	Gln
		180						185				190			
Leu	Leu	Leu	Phe	Pro	Asn	Ser	Thr	Ile	Gly	Asp	Ser	Gly	Val	Pro	Ala
		195					200					205			
Leu	Pro	Ser	Leu	Thr	Met	Arg	Arg	Met	Arg	Glu	Ser	Val	Ser	Arg	Met
	210					215					220				
Pro	Val	Ser	Ser	Gln	His	Arg	Tyr	Ser	Thr	Pro	His	Ala	Phe	Thr	Phe

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Asn Thr Ser Ser Pro Ser Ser Glu Gly Ser Leu Ser Gln Arg Gln Arg						
	245		250		255	
Ser Thr Ser Thr Pro Asn Val His Met Val Ser Thr Thr Leu Pro Val						
	260		265		270	
Asp Ser Arg Met Ile Glu Asp Ala Ile Arg Ser His Ser Glu Ser Ala						
	275		280		285	
Ser Pro Ser Ala Leu Ser Ser Ser Pro Asn Asn Leu Ser Pro Thr Gly						
	290		295		300	
Trp Ser Gln Pro Lys Thr Pro Val Pro Ala Gln Arg Glu Arg Ala Pro						
305		310		315		320
Val Ser Gly Thr Gln Glu Lys Asn Lys Ile Arg Pro Arg Gly Gln Arg						
	325		330		335	
Asp Ser Ser Tyr Tyr Trp Glu Ile Glu Ala Ser Glu Val Met Leu Ser						
	340		345		350	
Thr Arg Ile Gly Ser Gly Ser Phe Gly Thr Val Tyr Lys Gly Lys Trp						
	355		360		365	
His Gly Asp Val Ala Val Lys Ile Leu Lys Val Val Asp Pro Thr Pro						
	370		375		380	
Glu Gln Phe Gln Ala Phe Arg Asn Glu Val Ala Val Leu Arg Lys Thr						
385		390		395		400
Arg His Val Asn Ile Leu Leu Phe Met Gly Tyr Met Thr Lys Asp Asn						
	405		410		415	
Leu Ala Ile Val Thr Gln Trp Cys Glu Gly Ser Ser Leu Tyr Lys His						
	420		425		430	
Leu His Val Gln Glu Thr Lys Phe Gln Met Phe Gln Leu Ile Asp Ile						
	435		440		445	
Ala Arg Gln Thr Ala Gln Gly Met Asp Tyr Leu His Ala Lys Asn Ile						
	450		455		460	
Ile His Arg Asp Met Lys Ser Asn Asn Ile Phe Leu His Glu Gly Leu						
465		470		475		480
Thr Val Lys Ile Gly Asp Phe Gly Leu Ala Thr Val Lys Ser Arg Trp						
	485		490		495	
Ser Gly Ser Gln Gln Val Glu Gln Pro Thr Gly Ser Val Leu Trp Met						
	500		505		510	
Ala Pro Glu Val Ile Arg Met Gln Asp Asn Asn Pro Phe Ser Phe Gln						
	515		520		525	
Ser Asp Val Tyr Ser Tyr Gly Ile Val Leu Tyr Glu Leu Met Thr Gly						
	530		535		540	
Glu Leu Pro Tyr Ser His Ile Asn Asn Arg Asp Gln Ile Ile Phe Met						
545		550		555		560
Val Gly Arg Gly Tyr Ala Ser Pro Asp Leu Ser Lys Leu Tyr Lys Asn						
	565		570		575	
Cys Pro Lys Ala Met Lys Arg Leu Val Ala Asp Cys Val Lys Lys Val						
	580		585		590	
Lys Glu Glu Arg Pro Leu Phe Pro Gln Ile Leu Ser Ser Ile Glu Leu						
	595		600		605	
Leu Gln His Ser Leu Pro Lys Ile Asn Arg Ser Ala Ser Glu Pro Ser						
	610		615		620	
Leu His Arg Ala Ala His Thr Glu Asp Ile Asn Ala Cys Thr Leu Thr						
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 <211> 261
 <212> DNA
 <213> Homo sapiens

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<210> 4932
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 4932
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 Thr Gln Gly Thr Arg Lys Ile Leu Tyr Pro Tyr Ala His Leu Ser Ala
 35 40 45
 Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln Phe Trp Leu Val
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 65 70 75 80
 Ala Ser Trp His Arg Ser Thr
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 480
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<211> 181

<212> PRT

<213> Homo sapiens

<400> 4934

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Thr	Phe	Arg	Pro	Thr	Met	Glu	Glu	Phe	Lys	Asp	Phe	Asn	Lys	Tyr	Val
			20					25					30		
Ala	Tyr	Ile	Glu	Ser	Gln	Gly	Ala	His	Arg	Ala	Gly	Leu	Ala	Lys	Ile
		35					40					45			
Ile	Pro	Pro	Lys	Glu	Trp	Lys	Pro	Arg	Gln	Thr	Tyr	Asp	Asp	Ile	Asp
	50					55					60				
Asp	Val	Val	Ile	Pro	Ala	Pro	Ile	Gln	Gln	Val	Val	Thr	Gly	Gln	Ser
65					70				75					80	
Gly	Leu	Phe	Thr	Gln	Tyr	Asn	Ile	Gln	Lys	Lys	Ala	Met	Thr	Val	Gly
			85					90						95	
Glu	Tyr	Arg	Arg	Leu	Ala	Asn	Ser	Glu	Lys	Tyr	Cys	Thr	Pro	Arg	His
		100						105					110		
Gln	Asp	Phe	Asp	Asp	Leu	Glu	Arg	Lys	Tyr	Trp	Lys	Asn	Leu	Thr	Phe
	115					120						125			
Val	Ser	Pro	Ile	Tyr	Gly	Ala	Asp	Ile	Ser	Gly	Ser	Leu	Tyr	Asp	Asp
	130					135					140				
Val	Ser	Met	Arg	Leu	Arg	Gly	Arg	Thr	Gly	Thr	Ser	Phe	Leu	Val	Gly
145				150					155					160	
Gly	Gly	Gly	Arg	Ala	Leu	Asn	Gly	Thr	Leu	Pro	Trp	Gln	Met	Lys	Leu
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<210> 4935
<211> 1668
<212> DNA
<213> Homo sapiens

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<210> 4936

<211> 337

<212> PRT

<213> Homo sapiens

<400> 4936

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		20						25				30			
Gly	Leu	Leu	Cys	Val	Cys	Trp	Ser	Pro	Asp	Gly	Lys	Tyr	Ile	Val	Thr
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Gly	Gly	Glu	Asp	Asp	Leu	Val	Thr	Val	Trp	Ser	Phe	Val	Asp	Cys	Arg
	50					55					60				
Val	Ile	Ala	Arg	Gly	His	Gly	His	Lys	Ser	Trp	Val	Ser	Val	Val	Ala
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Phe	Asp	Pro	Tyr	Thr	Ser	Val	Glu	Glu	Gly	Asp	Pro	Met	Glu	Phe	
			85					90				95			
Ser	Gly	Ser	Asp	Glu	Asp	Phe	Gln	Asp	Leu	Leu	His	Phe	Gly	Glu	Ile
		100					105					110			
Glu	Gln	Ile	Val	His	Ser	Pro	Gly	Ser	Pro	Asn	Gly	Thr	Leu	Gln	Thr
	115					120					125				
Ala	Ala	Pro	Ser	Val	Thr	Tyr	Arg	Phe	Gly	Ser	Val	Gly	Gln	Asp	Thr
	130					135					140				
Gln	Leu	Cys	Leu	Trp	Asp	Leu	Thr	Glu	Asp	Ile	Leu	Phe	Pro	His	Gln
145					150					155				160	
Pro	Leu	Ser	Arg	Ala	Arg	Thr	His	Thr	Asn	Val	Met	Asn	Ala	Thr	Ser
			165					170					175		
Pro	Pro	Ala	Gly	Ser	Asn	Gly	Asn	Ser	Val	Thr	Thr	Pro	Gly	Asn	Ser
		180				185						190			
Val	Pro	Pro	Pro	Leu	Pro	Arg	Ser	Asn	Ser	Leu	Pro	His	Ser	Ala	Val
	195					200					205				
Ser	Asn	Ala	Gly	Ser	Lys	Ser	Ser	Val	Met	Asp	Gly	Ala	Ile	Ala	Ser
	210				215					220					
Gly	Val	Ser	Lys	Phe	Ala	Thr	Leu	Ser	Leu	His	Asp	Arg	Lys	Glu	Arg
225				230						235				240	
His	His	Glu	Lys	Asp	His	Lys	Arg	Asn	His	Ser	Met	Gly	His	Ile	Ser
			245					250					255		
Ser	Lys	Ser	Ser	Asp	Lys	Leu	Asn	Leu	Val	Thr	Lys	Thr	Lys	Thr	Asp
		260				265						270			
Pro	Ala	Lys	Thr	Leu	Gly	Thr	Pro	Leu	Cys	Pro	Arg	Met	Glu	Asp	Val
	275					280					285				
Pro	Leu	Leu	Glu	Pro	Leu	Ile	Cys	Lys	Lys	Ile	Ala	His	Glu	Arg	Leu
	290					295				300					
Thr	Val	Leu	Ile	Phe	Leu	Glu	Asp	Cys	Ile	Val	Thr	Ala	Cys	Gln	Glu

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 Trp Ala Leu Tyr Lys Gln Arg Glu Ala Pro Glu Leu Val
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<210> 4939

<211> 730

<212> DNA

<213> Homo sapiens

<400> 4939

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<210> 4940

<211> 158

<212> PRT

<213> Homo sapiens

<400> 4940

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 Ala Asp Ser Ser Ala Ser Thr Arg Pro Pro Gln Gly Pro Pro Ser Leu
 35 40 45
 Asp Ser Lys Ala Ser Thr Trp Leu Pro Leu Pro Val Thr Ser Ser Ser
 50 55 60
 Ala Glu Pro Ser Arg Pro Asn Ser Cys Pro Pro Ala Cys Ser Pro Ala
 65 70 75 80
 Ala Ala Ser Ser Phe Ser Phe Glu Ser Gln Pro Cys Pro Ser Ala Pro

	85		90		95
Ser Lys Ala	Ser Pro Ala	Pro Ala	Ala Leu Met	Cys Gly Thr	Thr Ser
	100		105		110
Pro Pro Ile	Ile Pro Ala	Ala Thr	Glu Pro Val	Cys Ala Ser	Ser Arg
	115		120		125
Ser Gly Arg	Pro Thr Ala	Thr Ala	Cys Ser Leu	Gln Pro Leu	Leu Asp
	130		135		140
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<210> 4941

<211> 1718

<212> DNA

<213> Homo sapiens

<400> 4941

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1140

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<210> 4942

<211> 469

<212> PRT

<213> Homo sapiens

<400> 4942

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Ile	Gln	Val	His	Tyr	His	Ile	Gly	Leu	Asn	Leu	Pro	Gly	Cys	Val	Ala
		20					25					30			
Pro	Pro	Lys	Asp	Thr	Lys	Lys	Gly	Ala	Gln	Pro	Ser	Pro	Phe	Val	Pro
		35				40					45				
Val	Arg	Trp	Val	Val	Lys	Val	Val	Lys	Thr	Leu	Leu	Arg	Met	Gly	
		50			55					60					
Cys	Ser	Tyr	Glu	Thr	Thr	Phe	Leu	Glu	Asp	Gln	Gly	Gly	Trp	Glu	Leu
65				70					75					80	
Met	Glu	Gln	Val	Glu	Ser	His	His	Arg	Gly	Val	Ala	Leu	Leu	Ala	Arg
			85					90						95	
Ala	Met	Val	Gln	Tyr	Ser	Cys	Gln	Glu	Leu	Cys	Arg	Ile	Leu	Tyr	Leu
		100					105					110			
Leu	Ile	Pro	Leu	Leu	Glu	Arg	Gly	Asp	Glu	Lys	His	Arg	Ile	Thr	Ala
		115				120					125				
Thr	Ala	Phe	Phe	Val	Glu	Leu	Leu	Gln	Met	Glu	Gln	Val	Arg	Arg	Ile
	130				135					140					
Pro	Glu	Glu	Tyr	Ser	Leu	Gly	Arg	Met	Ala	Glu	Gly	Leu	Ser	His	His
145				150					155					160	
Asp	Pro	Ile	Met	Lys	Val	Leu	Ser	Ile	Arg	Gly	Leu	Val	Ile	Leu	Ala
			165					170						175	
Arg	Arg	Ser	Glu	Lys	Thr	Ala	Lys	Val	Lys	Ala	Leu	Leu	Pro	Ser	Met
		180					185						190		
Val	Lys	Gly	Leu	Lys	Asn	Met	Asp	Gly	Met	Leu	Val	Val	Glu	Ala	Val
		195			200						205				
His	Asn	Leu	Lys	Ala	Val	Phe	Lys	Gly	Arg	Asp	Gln	Lys	Leu	Met	Asp

210	215	220
Ser Ala Val Tyr Val Glu Met Leu Gln Ile Leu Leu Pro His Phe Ser		
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Asp Ala Arg Glu Val Val Arg Ser Ser Cys Ile Asn Leu Tyr Gly Lys		240
	245	250
Val Val Gln Lys Leu Arg Ala Pro Arg Thr Gln Ala Met Glu Glu Gln		255
	260	265
Leu Val Ser Thr Leu Val Pro Leu Leu Leu Thr Met Gln Glu Gly Asn		270
	275	280
Ser Lys Val Ser Gln Lys Cys Val Lys Thr Leu Leu Arg Cys Ser Tyr		285
	290	295
Phe Met Ala Trp Glu Leu Pro Lys Arg Ala Tyr Ser Arg Lys Pro Trp		300
305	310	315
Asp Asn Gln Gln Gln Thr Val Ala Lys Ile Cys Lys Cys Leu Val Asn		320
	325	330
Thr His Arg Asp Ser Ala Phe Ile Phe Leu Ser Gln Ser Leu Glu Tyr		335
	340	345
Ala Lys Asn Ser Arg Ala Ser Leu Arg Lys Cys Ser Val Met Phe Ile		350
	355	360
Gly Ser Leu Val Pro Cys Met Glu Ser Ile Met Thr Glu Asp Arg Leu		365
	370	375
Asn Glu Val Lys Ala Ala Leu Asp Asn Leu Arg His Asp Pro Glu Ala		380
385	390	395
Ser Val Cys Ile Tyr Ala Ala Gln Val Gln Asp His Ile Leu Ala Ser		400
	405	410
Cys Trp Gln Asn Ser Trp Leu Pro His Gly Asn Ser Trp Val Cys Tyr		415
	420	425
Ser Ala Thr Thr His Arg Trp Ser Pro Ser Cys Glu Asn Leu Pro Thr		430
	435	440
Ser His Gln Arg Arg Ser Trp Ile Met Gln Ala Leu Gly Ser Trp Lys		445
	450	455
Met Ser Leu Lys Lys		460
465		

<210> 4943

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 4943

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120

tagggcgaat ccacttcatt agtgaccagc tcggggcggtt cacgtgcac acacaaataa
180

cttggccttt ttctgcctca gttgggggat ttcttaaag tagaatccc gcgtttccgc
240

tgccgtaatt tcctctcagg cgcaattact ctcttcata ttgggtaaca gtagaaggct
300

cagttttctct gctcatcaca cggccttcgg cactgtagct ttgggtgggt ggctgcagat
360

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420

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<210> 4944

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4944

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			20					25					30		
Val	Val	Lys	Leu	Phe	Ser	Glu	Leu	Pro	Leu	Ala	Lys	Lys	Lys	Glu	Thr
			35				40						45		
Tyr	Asp	Trp	Tyr	Pro	Asn	His	His	Thr	Tyr	Ala	Glu	Leu	Met	Gln	Thr
			50				55				60				
Leu	Arg	Phe	Leu	Gly	Leu	Tyr	Arg	Asp	Glu	His	Gln	Asp	Phe	Met	Asp
			65				70				75			80	
Glu	Gln	Lys	Arg	Leu	Lys	Lys	Leu	Arg	Gly	Lys	Glu	Lys	Pro	Lys	Lys
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Gly	Glu	Gly	Lys	Arg	Ala	Ala	Lys	Arg	Lys						
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<210> 4945

<211> 1792

<212> DNA

<213> Homo sapiens

<400> 4945

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 180

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240
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300
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420
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660
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1792

<210> 4946
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 4946

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      20             25             30
Pro Pro Gly Gln Glu Tyr Arg Met Tyr Asn Thr Tyr Asp Val His Phe
      35             40             45
Tyr Ala Ser Phe Ala Leu Ile Met Leu Trp Pro Lys Leu Glu Leu Ser
      50             55             60
Leu Gln Tyr Asp Met Ala Leu Ala Thr Leu Arg Glu Asp Leu Thr Arg
65             70             75             80
Arg Arg Tyr Leu Met Ser Gly Val Met Ala Pro Val Lys Arg Arg Asn
      85             90             95
Val Ile Pro His Asp Ile Gly Asp Pro Asp Asp Glu Pro Trp Leu Arg
      100            105            110
Val Asn Ala Tyr Leu Ile His Asp Thr Ala Asp Trp Lys Asp Leu Asn
      115            120            125
Leu Lys Phe Val Leu Gln Val Tyr Arg Asp Tyr Tyr Leu Thr Gly Asp
      130            135            140
Gln Asn Phe Leu Lys Asp Met Trp Pro Val Cys Leu Val Arg Asp Ala
145            150            155            160
His Ala Val Ala Ser Val Pro Gly Val Trp Leu Val Ser Gly Lys Ser
      165            170            175
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Ser Leu Ser Arg Leu
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<210> 4947
 <211> 2060
 <212> DNA
 <213> Homo sapiens

<400> 4947

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360
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420

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2040

aaaaaaaaa aaaaaaaaaa
2060

<210> 4948

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4948

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Val Asp Asp Met Trp His Tyr Ala Gly Asp Gln Ser Thr Asp Phe Asn
35 40 45
Trp Tyr Thr Arg Arg Ala Met Leu Ala Ala Ile Tyr Asn Thr Thr Glu
50 55 60
Leu Val Met Met Gln Asp Ser Ser Pro Asp Phe Glu Asp Thr Trp Arg
65 70 75 80
Phe Leu Glu Asn Arg Val Asn Asp Ala Met Asn Met Gly His Thr Ala
85 90 95
Lys Gln Val Lys Ser Thr Gly Glu Ala Leu Val Gln Gly Leu Met Gly
100 105 110
Ala Ala Val Thr Leu Lys Asn Leu Thr Xaa Leu Asn Gln Arg Arg
115 120 125

<210> 4949

<211> 1259

<212> DNA

<213> Homo sapiens

<400> 4949

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120
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180
ctggaggggc tgtgcgagag cagcgacttc gaatgcaatc agatgctaga ggcgcaggag
240
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420
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660

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 1080
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 1140
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<210> 4950

<211> 318

<212> PRT

<213> Homo sapiens

<400> 4950

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			20					25					30		
Lys	Asn	Phe	Gly	Gly	Gly	Asn	Thr	Ala	Trp	Glu	Glu	Lys	Thr	Leu	Ser
		35					40					45			
Lys	Tyr	Glu	Ser	Ser	Glu	Ile	Arg	Leu	Leu	Glu	Ile	Leu	Glu	Gly	Leu
	50					55					60				
Cys	Glu	Ser	Ser	Asp	Phe	Glu	Cys	Asn	Gln	Met	Leu	Glu	Ala	Gln	Glu
65					70					75				80	
Glu	His	Leu	Glu	Ala	Trp	Trp	Leu	Gln	Leu	Lys	Ser	Glu	Tyr	Pro	Asp
			85					90						95	
Leu	Phe	Glu	Trp	Phe	Cys	Val	Lys	Thr	Leu	Lys	Val	Cys	Cys	Ser	Pro
		100						105					110		
Gly	Thr	Tyr	Gly	Pro	Asp	Cys	Leu	Ala	Cys	Gln	Gly	Gly	Ser	Gln	Arg
	115						120					125			
Pro	Cys	Ser	Gly	Asn	Gly	His	Cys	Ser	Gly	Asp	Gly	Ser	Arg	Gln	Gly
	130					135					140				
Asp	Gly	Ser	Cys	Arg	Cys	His	Met	Gly	Tyr	Gln	Gly	Pro	Leu	Cys	Thr
145				150						155				160	
Asp	Cys	Met	Asp	Gly	Tyr	Phe	Ser	Ser	Leu	Arg	Asn	Glu	Thr	His	Ser
			165						170					175	
Ile	Cys	Thr	Ala	Cys	Asp	Glu	Ser	Cys	Lys	Thr	Cys	Ser	Gly	Leu	Thr
		180						185					190		
Asn	Arg	Asp	Cys	Gly	Glu	Cys	Glu	Val	Gly	Trp	Val	Leu	Asp	Glu	Gly
	195						200					205			
Ala	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Ala	Glu	Pro	Pro	Pro	Cys	Ser

210	215	220
Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr Cys Glu Glu		
225	230	235
Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly Pro Gly Asn Cys		240
	245	250
Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His Gly Gln Cys Ala Asp		255
	260	265
Val Asp Glu Cys Ser Leu Ala Glu Lys Thr Cys Val Arg Lys Asn Glu		270
	275	280
Asn Cys Tyr Asn Thr Pro Gly Ser Tyr Val Cys Val Cys Pro Asp Gly		285
	290	295
Phe Glu Glu Xaa Gly Arg Cys Leu Cys Ala Ala Gly Arg Gly		300
305	310	315

<210> 4951

<211> 1835

<212> DNA

<213> Homo sapiens

<400> 4951

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<210> 4952

<211> 318

<212> PRT

<213> Homo sapiens

<400> 4952

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		20						25					30	Leu
Val	Pro	Arg	Ala	Phe	His	Ala	Ser	Ala	Val	Gly	Leu	Arg	Ser	Ser
		35						40				45		Asp
Glu	Gln	Lys	Gln	Gln	Pro	Pro	Asn	Ser	Phe	Ser	Gln	Gln	His	Ser
		50					55				60			Glu
Thr	Gln	Gly	Ala	Glu	Lys	Pro	Asp	Pro	Glu	Ser	Ser	His	Ser	Pro
65					70					75				80
Arg	Tyr	Thr	Asp	Gln	Gly	Gly	Glu	Glu	Glu	Asp	Tyr	Glu	Ser	Glu
			85					90					95	
Glu	Gln	Leu	Gln	His	Arg	Ile	Leu	Thr	Ala	Ala	Leu	Glu	Phe	Val
		100						105					110	Pro
Ala	His	Gly	Trp	Thr	Ala	Glu	Ala	Ile	Ala	Glu	Gly	Ala	Gln	Ser
		115					120					125		Leu
Gly	Leu	Ser	Ser	Ala	Ala	Ala	Ser	Met	Phe	Gly	Arg	Met	Gly	Ser
		130					135				140			Glu
Leu	Ile	Leu	His	Phe	Val	Thr	Gln	Cys	Asn	Thr	Arg	Leu	Thr	Arg


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Leu Glu Glu Glu Gln Lys Leu Val Gln Leu Gly Gln Ala Glu Lys Arg
          165          170          175
Lys Thr Asp Gln Phe Leu Arg Asp Ala Val Glu Thr Arg Leu Arg Met
          180          185          190
Leu Ile Pro Tyr Ile Glu His Trp Pro Arg Ala Leu Ser Ile Leu Met
          195          200          205
Leu Pro His Asn Ile Pro Ser Ser Leu Ser Leu Leu Thr Ser Met Val
          210          215          220
Asp Asp Met Trp His Tyr Ala Gly Asp Gln Ser Thr Asp Phe Asn Trp
225          230          235          240
Tyr Thr Arg Arg Ala Met Leu Ala Ala Ile Tyr Asn Thr Thr Glu Leu
          245          250          255
Val Met Met Gln Asp Ser Ser Pro Asp Phe Glu Asp Thr Trp Arg Phe
          260          265          270
Leu Glu Asn Arg Val Asn Asp Ala Met Asn Met Gly His Thr Ala Lys
          275          280          285
Gln Val Lys Ser Thr Gly Glu Ala Leu Val Gln Gly Leu Met Gly Ala
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Ala Val Thr Leu Lys Asn Leu Thr Gly Leu Asn Gln Arg Arg
305          310          315

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<210> 4953

<211> 355

<212> DNA

<213> Homo sapiens

<400> 4953

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<210> 4954

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4954

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Met Ala Gly Gly Arg Gln Asp Arg Arg Ala Gln Ala Trp Thr Pro Leu
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Ser Ala Trp Gly Cys Leu Ala Ala Ser Pro Val Leu Gly Ala Gly Ile
          20          25          30
Thr Trp Pro Arg Val Pro Pro Gly Gly Ser Leu Lys Glu Gly Arg Ala
          35          40          45
Val Gly Arg Ser Gln Arg Gly Pro Thr Pro Gln Asn Ala His Lys Ser

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50 55 60
 Trp Asn Gln Leu Val Thr Ala Ala Gly Pro Ser Arg Pro Ile Trp Ile
 65 70 75 80
 Asp Pro Leu Gly Thr His Cys Thr Arg Glu Pro Gln Met Gln Leu Ser
 85 90 95
 Ser Met Gly Gly Ala Leu Ser Ala Gly Gly Val Trp Asp Arg Arg Arg
 100 105 110
 Glu Ala

<210> 4955

<211> 364

<212> DNA

<213> Homo sapiens

<400> 4955

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<210> 4956

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4956

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 20 25 30
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 35 40 45
 Lys Ser Ser Xaa Gly Gly Thr His Gly Ile Leu Gly Gly His Leu Arg
 50 55 60
 Ala Pro Pro Pro Thr Ile Pro Pro Ser Lys Val Ala Ser Glu Cys Glu
 65 70 75 80
 Gly Arg Gly Lys Gln Thr Pro Ala Pro His Ser Pro Ser Leu Pro His
 85 90 95
 Ser Tyr Arg Val Gly Gly Val Pro Gly Met Ile Pro Glu Gly Arg Ile
 100 105 110
 Gln Gly

<210> 4957
 <211> 872
 <212> DNA
 <213> Homo sapiens

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 300
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 360
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 480
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 780
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<210> 4958
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 4958
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 35 40 45
 Arg Ser Ser
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<210> 4959
 <211> 449

<212> DNA

<213> Homo sapiens

<400> 4959

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<210> 4960

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4960

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Lys	Val	Lys	Trp	Arg	Pro	Ser	Glu	Ser	Ser	Lys	Gly	Leu	Pro	Tyr	His
			20					25					30		
Ile	Trp	Arg	Ile	Arg	Cys	Phe	Ser	Pro	Ile	Ser	Gln	Gly	Trp	Lys	Leu
		35					40					45			
Ala	Ser	Ile	Leu	Arg	Trp	Pro	Glu	Ala	Leu	Pro	Leu	Arg	Gln	Ile	Met
		50				55					60				
Thr	Pro	Asp	Ala	Ser	Ser	Pro	Leu	Tyr	Pro	Cys	His	Met	Glu	Gly	Pro
					70					75				80	
Lys	His	Leu	Ala	Leu	Asn	Cys	Lys	Trp	Lys	Pro	Pro	Gln	Pro	Leu	His
				85					90					95	
Gln	Pro	Pro	Ala	Lys	Glu	Thr	Thr	Thr	Thr	Ile	Cys	Ile	Pro	Ser	Leu
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Asp	Thr	Arg													
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<210> 4961

<211> 4737

<212> DNA

<213> Homo sapiens

<400> 4961

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<210> 4962

<211> 1069

<212> PRT

<213> Homo sapiens

<400> 4962

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Pro Leu Gly Asp	Tyr Gly Val Gly	Ser Lys Asn Ser	Lys Arg Ala Arg
35	40	45	
Glu Lys Arg Asp	Ser Arg Asn Met	Glu Val Gln Val	Thr Gln Glu Met
50	55	60	
Arg Asn Val Ser	Ile Gly Met Gly	Ser Ser Asp Glu	Trp Ser Asp Val
65	70	75	80
Gln Asp Ile Ile	Asp Ser Thr Pro	Glu Leu Asp Met	Cys Pro Glu Thr
85	90	95	
Arg Leu Asp Arg	Thr Gly Ser Ser	Pro Thr Gln Gly	Ile Val Asn Lys
100	105	110	
Ala Phe Gly Ile	Asn Thr Asp Ser	Leu Tyr His Glu	Leu Ser Thr Ala
115	120	125	
Gly Ser Glu Val	Ile Gly Asp Val	Asp Glu Gly Ala	Asp Leu Leu Gly
130	135	140	
Glu Phe Ser Gly	Met Gly Lys Glu	Val Gly Asn Leu	Leu Leu Glu Asn
145	150	155	160
Ser Gln Leu Leu	Glu Thr Lys Asn	Ala Leu Asn Val	Val Lys Asn Asp
165	170	175	
Leu Ile Ala Lys	Val Asp Gln Leu	Ser Gly Glu Gln	Glu Val Leu Arg
180	185	190	
Gly Glu Leu Glu	Ala Ala Lys Gln	Ala Lys Val Lys	Leu Glu Asn Arg
195	200	205	
Ile Lys Glu Leu	Glu Glu Glu Leu	Lys Arg Val Lys	Ser Glu Ala Ile
210	215	220	
Ile Ala Arg Arg	Glu Pro Lys Glu	Glu Ala Glu Asp	Val Ser Ser Tyr
225	230	235	240
Leu Cys Thr Glu	Ser Asp Lys Ile	Pro Met Ala Gln	Arg Arg Arg Phe
245	250	255	
Thr Arg Val Glu	Met Ala Arg Val	Leu Met Glu Arg	Asn Gln Tyr Lys
260	265	270	
Glu Arg Leu Met	Glu Leu Gln Glu	Ala Val Arg Trp	Thr Glu Met Ile
275	280	285	
Arg Ala Ser Arg	Glu His Pro Ser	Val Gln Glu Lys	Lys Lys Ser Thr
290	295	300	
Ile Trp Gln Phe	Phe Ser Arg Leu	Phe Ser Ser Ser	Ser Ser Pro Pro
305	310	315	320
Pro Ala Lys Arg	Pro Tyr Pro Ser	Val Asn Ile His	Tyr Lys Ser Pro
325	330	335	
Thr Thr Ala Gly	Phe Ser Gln Arg	Arg Asn His Ala	Met Cys Pro Ile
340	345	350	
Ser Ala Gly Ser	Arg Pro Leu Glu	Phe Phe Pro Asp	Asp Asp Cys Thr
355	360	365	
Ser Ser Ala Arg	Arg Glu Gln Lys	Arg Glu Gln Tyr	Arg Gln Val Arg
370	375	380	
Glu His Val Arg	Asn Asp Gly Arg	Leu Gln Ala Cys	Gly Trp Ser
385	390	395	400
Leu Pro Ala Lys	Tyr Lys Gln Leu	Ser Pro Asn Gly	Gly Gln Glu Asp
405	410	415	
Thr Arg Met Lys	Asn Val Pro Val	Pro Val Tyr Cys	Arg Pro Leu Val
420	425	430	
Glu Lys Asp Pro	Thr Met Lys Leu	Trp Cys Ala Ala	Gly Val Asn Leu

435	440	445
Ser Gly Trp Arg Pro Asn Glu Asp Asp Ala Gly Asn Gly Val Lys Pro		
450	455	460
Ala Pro Gly Arg Asp Pro Leu Thr Cys Asp Arg Glu Gly Asp Gly Glu		
465	470	475
Pro Lys Ser Ala His Ala Ser Pro Glu Lys Lys Lys Ala Lys Glu Leu		480
	485	490
Pro Glu Met Asp Ala Thr Ser Ser Arg Val Trp Ile Leu Thr Ser Thr		495
	500	505
Leu Thr Thr Ser Lys Val Val Ile Ile Asp Ala Asn Gln Pro Gly Thr		510
	515	520
Val Val Asp Gln Phe Thr Val Cys Asn Ala His Val Leu Cys Ile Ser		525
	530	535
Ser Ile Pro Ala Ala Ser Asp Ser Asp Tyr Pro Pro Gly Glu Met Phe		540
545	550	555
Leu Asp Ser Asp Val Asn Pro Glu Asp Pro Gly Ala Asp Gly Val Leu		560
	565	570
Ala Gly Ile Thr Leu Val Gly Cys Ala Thr Arg Cys Asn Val Pro Arg		575
	580	585
Ser Asn Cys Ser Ser Arg Gly Asp Thr Pro Val Leu Asp Lys Gly Gln		590
	595	600
Gly Glu Val Ala Thr Ile Ala Asn Gly Lys Val Asn Pro Ser Gln Ser		605
	610	615
Thr Glu Glu Ala Thr Glu Ala Thr Glu Val Pro Asp Pro Gly Pro Ser		620
625	630	635
Glu Pro Glu Thr Ala Thr Leu Arg Pro Gly Pro Leu Thr Glu His Val		640
	645	650
Phe Thr Asp Pro Ala Pro Thr Pro Ser Ser Gly Pro Gln Pro Gly Ser		655
	660	665
Glu Asn Gly Pro Glu Pro Asp Ser Ser Ser Thr Arg Pro Glu Pro Glu		670
	675	680
Pro Ser Gly Asp Pro Thr Gly Ala Gly Ser Ser Ala Ala Pro Thr Met		685
	690	695
Trp Leu Gly Ala Gln Asn Gly Trp Leu Tyr Val His Ser Ala Val Ala		700
705	710	715
Asn Trp Lys Lys Cys Leu His Ser Ile Lys Leu Lys Asp Ser Val Leu		720
	725	730
Ser Leu Val His Val Lys Gly Arg Val Leu Val Ala Leu Ala Asp Gly		735
	740	745
Thr Leu Ala Ile Phe His Arg Gly Glu Asp Gly Gln Trp Asp Leu Ser		750
	755	760
Asn Tyr His Leu Met Asp Leu Gly His Pro His His Ser Ile Arg Cys		765
	770	775
Met Ala Val Val Tyr Asp Arg Val Trp Cys Gly Tyr Lys Asn Lys Val		780
785	790	795
His Val Ile Gln Pro Lys Thr Met Gln Ile Glu Lys Ser Phe Asp Ala		800
	805	810
His Pro Arg Arg Glu Ser Gln Val Arg Gln Leu Ala Trp Ile Gly Asp		815
	820	825
Gly Val Trp Val Ser Ile Arg Leu Asp Ser Thr Leu Arg Leu Tyr His		830
	835	840
Ala His Thr His Gln His Leu Gln Asp Val Asp Ile Glu Pro Tyr Val		845
	850	855
Ser Lys Met Leu Gly Thr Gly Lys Leu Gly Phe Ser Phe Val Arg Ile		860

865 870 875 880
 Thr Ala Leu Leu Val Ala Gly Ser Arg Leu Trp Val Gly Thr Gly Asn
 885 890 895
 Gly Val Val Ile Ser Ile Pro Leu Thr Glu Thr Val Val Leu His Arg
 900 905 910
 Gly Gln Leu Leu Gly Leu Arg Ala Asn Lys Thr Ser Pro Thr Ser Gly
 915 920 925
 Glu Gly Ala Arg Pro Gly Gly Ile Ile His Val Tyr Gly Asp Asp Ser
 930 935 940
 Ser Asp Arg Ala Ala Ser Ser Phe Ile Pro Tyr Cys Ser Met Ala Gln
 945 950 955 960
 Ala Gln Leu Cys Phe His Gly His Arg Asp Ala Val Lys Phe Phe Val
 965 970 975
 Ser Val Pro Gly Asn Val Leu Ala Thr Leu Asn Gly Ser Val Leu Asp
 980 985 990
 Ser Pro Ala Glu Gly Pro Gly Pro Ala Ala Pro Ala Ser Glu Val Glu
 995 1000 1005
 Gly Gln Lys Leu Arg Asn Val Leu Val Leu Ser Gly Gly Glu Gly Tyr
 1010 1015 1020
 Ile Asp Phe Arg Ile Gly Asp Gly Glu Asp Asp Glu Thr Glu Glu Gly
 1025 1030 1035 1040
 Ala Gly Asp Met Ser Gln Val Lys Pro Val Leu Ser Lys Ala Glu Arg
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 1060 1065

<210> 4963

<211> 1575

<212> DNA

<213> Homo sapiens

<400> 4963

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 120
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 180
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 240
 cccaattacg ttcaggacaa gtatctgtta cagcttctaa gaaacgcaga tgacgtcagc
 300
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 360
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 420
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 480
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 600
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 840
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 1020
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 1080
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 1140
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 1200
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 1260
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 1440
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<210> 4964

<211> 304

<212> PRT

<213> Homo sapiens

<400> 4964

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Tyr	Phe	Leu	Thr	Glu	Tyr	Ser	Thr	His	Gln	Leu	Phe	Ser	Gln	Leu	Thr
			20					25					30		
Leu	Leu	Gln	Gln	Glu	Leu	Phe	Gln	Lys	Cys	His	Pro	Val	His	Phe	Leu
		35					40					45			
Asn	Ser	Arg	Ala	Leu	Gly	Val	Met	Asp	Lys	Ser	Thr	Ala	Ile	Pro	Lys
	50					55					60				
Ala	Ser	Ser	Ser	Glu	Ser	Leu	Ser	Ala	Lys	Thr	Cys	Ser	Leu	Phe	Leu
65					70					75				80	
Pro	Asn	Tyr	Val	Gln	Asp	Lys	Tyr	Leu	Leu	Gln	Leu	Leu	Arg	Asn	Ala
			85					90						95	
Asp	Asp	Val	Ser	Thr	Trp	Val	Ala	Ala	Glu	Ile	Val	Thr	Ser	His	Thr
		100					105						110		
Ser	Lys	Leu	Gln	Val	Asn	Leu	Leu	Ser	Lys	Phe	Xaa	Leu	Ile	Ala	Lys

115	120	125
Ser Cys Tyr Glu Gln Arg Asn Phe Ala Thr Ala Met Gln Ile Leu Ser		
130	135	140
Gly Leu Glu His Leu Ala Val Arg Gln Ser Pro Ala Trp Arg Ile Leu		
145	150	155
Pro Ala Lys Ile Ala Glu Val Met Glu Glu Leu Lys Ala Val Glu Val		
165	170	175
Phe Leu Lys Ser Asp Ser Leu Cys Leu Met Glu Gly Arg Arg Phe Arg		
180	185	190
Ala Gln Pro Thr Leu Pro Ser Ala His Leu Leu Ala Met His Ile Gln		
195	200	205
Gln Leu Glu Thr Gly Gly Phe Thr Met Thr Asn Gly Ala His Arg Trp		
210	215	220
Ser Lys Leu Arg Asn Ile Ala Lys Val Val Ser Gln Val His Ala Phe		
225	230	235
Gln Glu Asn Pro Tyr Thr Phe Ser Pro Asp Pro Lys Leu Gln Ser Tyr		
245	250	255
Leu Lys Gln Arg Ile Ala Arg Phe Ser Gly Ala Asp Ile Ser Thr Leu		
260	265	270
Ala Ala Asp Ser Arg Ala Asn Phe His Gln Val Ser Ser Glu Lys His		
275	280	285
Ser Arg Lys Ile Gln Asp Lys Leu Arg Arg Met Lys Ala Thr Phe Gln		
290	295	300

<210> 4965

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 4965

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240
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 1380
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 1440
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 1474

<210> 4966

<211> 212

<212> PRT

<213> Homo sapiens

<400> 4966

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 20 25 30
 Leu Ile Leu Lys Trp Glu Thr Leu Asn Asp Ala Gly Phe Thr Thr Ala
 35 40 45
 Asn Asn Ile Ala Asn Leu Lys Ile Ser Leu Leu Asn Lys Asp Lys Ile
 50 55 60
 Glu Leu Asp Ser Ser Ser Pro Ala Ser Lys Glu Asn Glu Glu Lys Val
 65 70 75 80
 Cys Leu Glu Tyr Asn Glu Glu Leu Glu Lys Leu Cys Glu Glu Leu Gln
 85 90 95
 Ala Thr Leu Asp Gly Leu Thr Lys Ile Gln Val Lys Met Glu Lys Leu
 100 105 110
 Ser Ser Thr Thr Lys Gly Ile Cys Glu Leu Glu Asn Tyr His Tyr Gly
 115 120 125
 Glu Glu Ser Lys Arg Pro Pro Leu Phe His Thr Trp Pro Thr Thr His
 130 135 140
 Phe Tyr Glu Val Ser His Lys Leu Leu Glu Met Tyr Arg Lys Glu Leu
 145 150 155 160
 Leu Leu Lys Arg Thr Val Ala Lys Glu Leu Ala His Thr Gly Asp Pro

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                165                170                175
Asp Leu Thr Leu Ser Tyr Leu Ser Met Trp Leu His Gln Pro Tyr Val
                180                185                190
Glu Ser Asp Ser Arg Leu His Leu Glu Ser Met Leu Leu Glu Thr Gly
                195                200                205
His Arg Ala Leu
                210

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<210> 4967
 <211> 550
 <212> DNA
 <213> Homo sapiens

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<400> 4967
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120
cgccttgacc tccaaaatag ctgnggttac acgcgtgagc ccccatgccc agcttcccag
180
taagacattt attctgagga gttggctcac atgagtaagg aggctgagaa gttccacaat
240
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300
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360
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420
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<210> 4968
 <211> 51
 <212> PRT
 <213> Homo sapiens

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<400> 4968
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Tyr Ser Ser Leu Gln Pro Arg Thr Pro Gly Leu Lys Gln Ser Phe Arg
20      25      30
Leu Asp Leu Gln Asn Ser Trp Xaa Tyr Thr Arg Glu Pro Pro Cys Pro
35      40      45
Ala Ser Gln
50

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<210> 4969
 <211> 2911
 <212> DNA
 <213> Homo sapiens

<400> 4969

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180
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240
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300
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540
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2911

<210> 4970

<211> 155

<212> PRT

<213> Homo sapiens

<400> 4970

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Val Ala Leu Asn Met Val Leu Pro Asp Glu Lys Gly Ala Gly Ala Leu			
35	40	45	
Pro Phe Leu Pro Gly Val Phe Gly Tyr Ala Val Asn Pro Gln Ala Ala			
50	55	60	
Pro Pro Ala Pro Pro Thr Pro Pro Pro Thr Leu Pro Pro Pro Ile			
65	70	75	80
Pro Pro Lys Gly Glu Gly Glu Arg Ala Gly Val Glu Arg Thr Gln Lys			
85	90	95	
Gly Asp Val Gly Xaa Asn Pro Gly Ala Gln Ser Pro Phe His Gln Met			
100	105	110	
Pro Pro Ser Leu Asn Pro Pro Pro Leu Pro Ala Pro Trp Pro Pro Cys			
115	120	125	
Pro Leu Gly Ala Pro Ser His Ser Cys Ala Gly Thr Trp Gly Pro Leu			
130	135	140	
Glu Leu Arg Gly Gln Ala Ala Leu Cys Glu Met			
145	150	155	

<210> 4971

<211> 2939

<212> DNA

<213> Homo sapiens

<400> 4971

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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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<210> 4977

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<212> DNA

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<400> 4977

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<211> 792

<212> PRT

<213> Homo sapiens

<400> 4978

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Glu	Thr	Thr	Thr	Ser	Thr	Ile	Ile	Thr	Thr	Thr	Val	Ile	Thr	Thr	Glu
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Cys	Thr	Tyr	Asn	Val	Thr	Val	Tyr	Thr	Gly	Tyr	Gly	Val	Glu	Leu	Gln
			85					90					95		
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4150

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Pro Gly Phe Val Leu Glu Gly Ser Ser Leu Leu Thr Cys Tyr Ser Arg						
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Glu Thr Gly Thr Pro Ile Trp Thr Ser Arg Leu Pro His Cys Val Ser						
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Glu Glu Ser Leu Ala Cys Asp Asn Pro Gly Leu Pro Glu Asn Gly Tyr						
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Gln Ile Leu Tyr Lys Arg Leu Tyr Leu Pro Gly Glu Ser Leu Thr Phe						
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Met Cys Tyr Glu Gly Phe Glu Leu Met Gly Glu Val Thr Ile Arg Cys						
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Ile Leu Gly Gln Pro Ser His Trp Asn Gly Pro Leu Pro Val Cys Lys						
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Val Asn Gln Asp Ser Phe Glu His Ala Leu Glu Ala Glu Ala Ala Ala						
	705		710		715	
Glu Thr Ser Leu Glu Gly Gly Asn Met Ala Leu Ala Ile Phe Ile Pro						
	725		730		735	
Val Leu Ile Ile Ser Leu Leu Leu Gly Gly Ala Tyr Ile Tyr Ile Thr						
	740		745		750	
Arg Cys Arg Tyr Tyr Ser Asn Leu Arg Leu Pro Leu Met Tyr Ser His						
	755		760		765	
Pro Tyr Ser Gln Ile Thr Val Glu Thr Glu Phe Asp Asn Pro Ile Tyr						
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<210> 4979

<211> 1865

<212> DNA

<213> Homo sapiens

<400> 4979

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<210> 4980

<211> 266

<212> PRT

<213> Homo sapiens

<400> 4980

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 Val Gly Pro Pro Phe Leu Met Asp Glu Asn Ser Trp Phe Asn Lys Cys
 50 55 60
 Lys Arg Val Lys Gln Lys Tyr Gln Leu Thr Leu Glu Gln Lys Gly Tyr
 65 70 75 80
 Leu Glu Glu Leu Leu Arg Leu Arg Glu Asn Gln Leu Ser Glu Ser Val
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 Ser Gln Asn Lys Ile Leu Leu Gln Arg Ile Glu Asp Ser Asp Leu Ala
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 His Lys Leu Glu Lys Glu Gln Leu Glu Tyr Ile Ile Val Glu Leu Gln
 115 120 125
 Asp Gln Leu Thr Val Leu Lys Asn Asn Asp Leu Arg Ser Arg Gln Glu
 130 135 140
 Leu Thr Ala His Leu Thr Asn Gln Trp Pro Ser Pro Gly Ala Leu Asp
 145 150 155 160
 Val Asn Ala Val Ala Leu Asp Thr Leu Leu Tyr Arg Lys His Asn Lys
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 Gln Trp Lys Ser Tyr Gln Ser Leu Asp Gln Leu Ser Ala Glu Val Ser
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 Leu Ser Gln Thr Ser Leu Asp Pro Gly Gln Ser Gln Glu Gly Asp Gly
 195 200 205
 Lys Gln Asp Thr Leu Asn Val Met Ser Glu Gly Lys Glu Asp Thr Pro
 210 215 220
 Ser Leu Leu Gly Leu Cys Gly Ser Leu Thr Ser Val Ala Ser Tyr Lys
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<210> 4981

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 4981

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<210> 4982

<211> 73
 <212> PRT
 <213> Homo sapiens

<400> 4982

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			20					25					30		
Gln	Pro	Pro	Ser	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Leu	Leu	Ser
			35				40					45			
Ser	Trp	Asp	Tyr	Arg	Cys	Ser	Pro	Pro	His	Pro	Ala	Asn	Phe	Cys	Ile
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Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys							
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<210> 4983
 <211> 1418
 <212> DNA
 <213> Homo sapiens

<400> 4983

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<210> 4984

<211> 256

<212> PRT

<213> Homo sapiens

<400> 4984

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			20					25					30		
Gly	Ser	Phe	Leu	Ala	Arg	Ala	Lys	Phe	Ile	Pro	Leu	Ile	Thr	Val	Lys
		35					40					45			
Ser	Cys	Leu	Asp	Leu	Leu	Val	Asn	Trp	Leu	His	Ile	Tyr	Leu	Asn	Asn
	50					55				60					
Gln	Asp	Ser	Gly	Thr	Lys	Ala	Phe	Cys	Asp	Val	Ala	Leu	His	Gly	Pro
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Phe	Tyr	Ser	Ala	Cys	Gln	Ala	Val	Phe	Tyr	Thr	Phe	Val	Phe	Arg	His
			85					90						95	
Lys	Gln	Leu	Leu	Ser	Gly	Asn	Leu	Lys	Glu	Gly	Leu	Gln	Tyr	Leu	Gln
		100					105					110			
Ser	Leu	Asn	Phe	Glu	Arg	Ile	Val	Met	Ser	Gln	Leu	Asn	Pro	Leu	Lys
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Ile	Cys	Leu	Pro	Ser	Val	Val	Asn	Phe	Phe	Ala	Ala	Ile	Thr	Asn	Lys
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Tyr	Gln	Leu	Val	Phe	Cys	Tyr	Thr	Ile	Ile	Glu	Arg	Asn	Asn	Arg	Gln
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Met	Leu	Pro	Val	Ile	Arg	Ser	Thr	Ala	Gly	Gly	Asp	Ser	Val	Gln	Thr
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Cys	Thr	Asn	Pro	Leu	Asp	Thr	Phe	Phe	Pro	Phe	Asp	Pro	Cys	Val	Leu
		180					185					190			
Lys	Arg	Ser	Lys	Lys	Phe	Ile	Asp	Pro	Ile	Tyr	Gln	Val	Trp	Glu	Asp
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Ile	Val	Glu	Asp	Glu	Asp	Asp	Asp	Phe	Leu	Lys	Gly	Glu	Ile	Pro	Gln
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245

250

255

<210> 4985
<211> 5695
<212> DNA
<213> Homo sapiens

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<210> 4986

<211> 1239

<212> PRT

<213> Homo sapiens

<400> 4986

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			20					25					30		
Met	Asn	Thr	Lys	Asp	Thr	Thr	Glu	Val	Ala	Glu	Asn	Ser	His	His	Leu
			35				40					45			
Lys	Ile	Phe	Leu	Pro	Lys	Lys	Leu	Leu	Glu	Cys	Leu	Pro	Arg	Cys	Pro
	50					55					60				
Leu	Leu	Pro	Pro	Glu	Arg	Leu	Arg	Trp	Asn	Thr	Asn	Glu	Glu	Ile	Ala
65					70				75					80	
Ser	Tyr	Leu	Ile	Thr	Phe	Glu	Lys	His	Asp	Glu	Trp	Leu	Ser	Cys	Ala

4161

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Pro Val Gly Ala Ser Glu Leu	Glu Pro Phe Ser Leu Ser Ser Phe Pro	
530	535	540
Asp Leu Met Gly Glu Leu Ile Ser Asp Glu Ala Pro Ser Ile Pro Ala		
545	550	555
Pro Thr Pro Gln Leu Ser Pro Ala Leu Ser Thr Ile Thr Asp Phe Ser		
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Pro Glu Trp Ser Tyr Pro Glu Gly Gly Val Lys Val Leu Ile Thr Gly		
580	585	590
Pro Trp Thr Glu Ala Ala Glu His Tyr Ser Cys Val Phe Asp His Ile		
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Ala Val Pro Ala Ser Leu Val Gln Pro Gly Val Leu Arg Cys Tyr Cys		
610	615	620
Pro Ala His Glu Val Gly Leu Val Ser Leu Gln Val Ala Gly Arg Glu		
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Gly Pro Leu Ser Ala Ser Val Leu Phe Glu Tyr Arg Ala Arg Arg Phe		
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Leu Ser Leu Pro Ser Thr Gln Leu Asp Trp Leu Ser Leu Asp Asp Asn		
660	665	670
Gln Phe Arg Met Ser Ile Leu Glu Arg Leu Glu Gln Met Glu Lys Arg		
675	680	685
Met Ala Glu Ile Ala Ala Ala Gly Gln Val Pro Cys Gln Gly Pro Asp		
690	695	700
Ala Pro Pro Val Gln Asp Glu Gly Gln Gly Pro Gly Phe Glu Ala Arg		
705	710	715
Val Val Val Leu Val Glu Ser Met Ile Pro Arg Ser Thr Trp Lys Gly		
725	730	735
Pro Glu Arg Leu Ala His Gly Ser Pro Phe Arg Gly Met Ser Leu Leu		
740	745	750
His Leu Ala Ala Ala Gln Gly Tyr Ala Arg Leu Ile Glu Thr Leu Ser		
755	760	765
Gln Trp Arg Ser Val Glu Thr Gly Ser Leu Asp Leu Glu Gln Glu Val		
770	775	780
Asp Pro Leu Asn Val Asp His Phe Ser Cys Thr Pro Leu Met Trp Ala		
785	790	795
Cys Ala Leu Gly His Leu Glu Ala Ala Val Leu Leu Phe Arg Trp Asn		
805	810	815
Arg Gln Ala Leu Ser Ile Pro Asp Ser Leu Gly Arg Leu Pro Leu Ser		
820	825	830
Val Ala His Ser Arg Gly His Val Arg Leu Ala Arg Cys Leu Glu Glu		
835	840	845
Leu Gln Arg Gln Glu Pro Ser Val Glu Pro Pro Phe Ala Leu Ser Pro		
850	855	860
Pro Ser Ser Ser Pro Asp Thr Gly Leu Ser Ser Val Ser Ser Pro Ser		
865	870	875
Glu Leu Ser Asp Gly Thr Phe Ser Val Thr Ser Ala Tyr Ser Ser Ala		
885	890	895
Pro Asp Gly Ser Pro Pro Pro Ala Pro Leu Pro Ala Ser Glu Met Thr		
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Met Glu Asp Met Ala Pro Gly Gln Leu Ser Ser Gly Val Pro Glu Ala		
915	920	925
Pro Leu Leu Leu Met Asp Tyr Glu Ala Thr Asn Ser Lys Gly Pro Leu		
930	935	940
Ser Ser Leu Pro Ala Leu Pro Pro Ala Ser Asp Asp Gly Ala Ala Pro		

945 950 955 960
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 Ile Ser Leu Ala Lys Gln Ile Ile Glu Ala Thr Pro Glu Arg Ile Lys
 980 985 990
 Arg Glu Asp Phe Val Gly Leu Pro Glu Ala Gly Ala Ser Met Arg Glu
 995 1000 1005
 Arg Thr Gly Ala Val Gly Leu Ser Glu Thr Met Ser Trp Leu Ala Ser
 1010 1015 1020
 Tyr Leu Glu Asn Val Asp His Phe Pro Ser Ser Thr Pro Pro Ser Glu
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 1060 1065 1070
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 1075 1080 1085
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 Lys Glu Gln Gln Glu Val Ala Ala Ala Val Ile Gln Arg Cys Tyr Arg
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 Lys Tyr Lys Gln Leu Thr Trp Ile Ala Leu Lys Phe Ala Leu Tyr Lys
 1125 1130 1135
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 Tyr Glu Gln Lys Arg Phe Gln Gln Ser Arg Arg Ala Ala Val Leu Ile
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 1170 1175 1180
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<210> 4987

<211> 357

<212> DNA

<213> Homo sapiens

<400> 4987

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357

<210> 4988

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4988

Met	Gly	Ala	Arg	Arg	Leu	Leu	Pro	Ser	Leu	Arg	His	Cys	Ser	Val	Tyr
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Ser	Ser	Ser	Cys	Asp	Ser	Glu	Lys	Lys	Ser	Leu	Trp	Leu	Phe	Ala	Ala
			20					25					30		
Phe	Pro	Leu	Cys	Phe	Leu	Gly	Thr	Ala	Phe	Pro	Gln	Gly	Glu	Gln	Arg
		35					40					45			
Pro	Leu	Glu	Ala	Lys	Gly	Leu	Ala	Thr	Gln	Gly	Ala	Ser	Leu	Pro	Leu
	50					55					60				
Leu	Pro	Thr	Val	Thr	Cys	Val	Ser	Ile	Lys	Ser	Trp	Lys	Met	Glu	Cys
65					70				75					80	
Pro	His	Gln	Gly	Asp	Gly	Val	Thr	Thr	Glu	Ala	Gly	Ser	Glu	Leu	Pro
			85					90						95	
Gln	Leu	Leu	Gln	Ala	Pro	Trp	Pro	Arg							
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<210> 4989

<211> 1723

<212> DNA

<213> Homo sapiens

<400> 4989

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<210> 4990

<211> 54

<212> PRT

<213> Homo sapiens

<400> 4990

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Lys	Lys	Arg	Phe	Gln	Gln	Ala	Thr	Pro	Gly	Ser	Ala	Pro	Val	Ser	Arg
		20						25					30		
Glu	Gln	Ala	Ser	Phe	Leu	Ala	Ser	Ser	Phe	Ser	Ser	Ser	Ala	Gly	Pro
		35					40						45		
Arg	Thr	Ser	Ile	Ser	Gly										
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<210> 4991

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4991

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 720
 ctgcgagaca agtacctgga ggagaaggag gacctggagc tcaagtgtc gacctggga
 780
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 828

<210> 4992

<211> 69

<212> PRT

<213> Homo sapiens

<400> 4992

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 20 25 30
 Glu Leu Arg Asp Lys Tyr Leu Glu Glu Lys Glu Asp Leu Glu Leu Lys
 35 40 45
 Cys Ser Thr Leu Gly Lys Asp Cys Glu Met Tyr Lys His Arg Met Asn
 50 55 60
 Thr Val Met Leu Gln
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<210> 4993

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4993

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 120
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 720
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<210> 4994

<211> 133

<212> PRT

<213> Homo sapiens

<400> 4994

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Ala	Arg	Gly	Glu	Gly	Thr	His	Ser	Glu	Glu	Glu	Gly	Phe	Ala	Met	Asp
		20					25				30				
Glu	Glu	Asp	Ser	Asp	Gly	Glu	Leu	Asn	Thr	Trp	Glu	Leu	Ser	Glu	Gly
	35					40					45				
Thr	Asn	Cys	Pro	Pro	Lys	Glu	Gln	Pro	Gly	Asp	Leu	Phe	Asn	Glu	Asp
	50				55					60					
Trp	Asp	Ser	Glu	Leu	Lys	Ala	Asp	Gln	Gly	Asn	Pro	Tyr	Asp	Ala	Asp
65				70				75					80		
Asp	Ile	Gln	Glu	Ser	Ile	Ser	Gln	Glu	Leu	Lys	Pro	Trp	Val	Cys	Cys
	85						90						95		
Ala	Pro	Gln	Gly	Asp	Met	Ile	Tyr	Asp	Pro	Ser	Trp	His	His	Pro	Pro
	100						105					110			
Pro	Leu	Ile	Pro	Tyr	Tyr	Ser	Lys	Met	Val	Phe	Glu	Thr	Gly	Gln	Phe
	115					120						125			
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<210> 4995

<211> 1595

<212> DNA

<213> Homo sapiens

<400> 4995

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 Pro Val His Val Asp Asn Cys Ile Leu Asn Ala Glu Thr Leu Val Cys
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<212> PRT

<213> Homo sapiens

<400> 4998

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Lys	Thr	Leu	Tyr	Leu	Val	Met	Glu	Tyr	Ala	Ser	Ala	Gly	Glu	Pro	Pro
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Thr	Leu	Ser	Ala	Leu	Pro	Leu	Cys	His	Leu	Pro	Leu	Pro	Leu	His	Leu
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Leu	Val	Ser	His	Gly	Arg	Met	Lys	Glu	Lys	Glu	Ala	Arg	Ala	Lys	Phe
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<211> 307

<212> PRT

<213> Homo sapiens

<400> 5000

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Arg	Ser	Ser	Tyr	Asn	Glu	Lys	Thr	Pro	Arg	Ile	Val	Val	Ser	Arg	Ser

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225	230	235
Val Thr Tyr Ile Lys Lys Trp Asp Ile Cys Ala Gly Asn Ala Ile Leu		
245	250	255
Lys Ala Leu Gly Gly His Met Thr Thr Leu Ser Gly Glu Glu Ile Ser		
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Tyr Thr Gly Ser Asp Gly Ile Glu Gly Gly Leu Leu Ala Ser Ile Arg		
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<211> 3427

<212> DNA

<213> Homo sapiens

<400> 5001

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<211> 335

<212> PRT

<213> Homo sapiens

<400> 5002

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Ile	Val	Leu	Ile	Val	Glu	Gly	Thr	Glu	Phe	Pro	Cys	His	Lys	Met	Val
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Ser	Glu	Ser	Lys	Gln	Thr	His	Val	His	Leu	Arg	Asn	Val	Asp	Ala	Ala
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Val	Glu	Asp	Val	Leu	Gln	Arg	Cys	Arg	Glu	Tyr	Leu	Ile	Lys	Lys	Ile

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Cys Glu Glu Leu Lys Gln Ser Ala Lys Arg Met Val Glu His Lys Phe		
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Thr Ala Val Tyr His Gln Asp Ala Phe Met Gln Leu Leu His Asp Leu		
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Leu Ile Asp Ile Leu Ser Ser Asp Asn Leu Asn Val Glu Lys Glu Glu		
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Thr Val Arg Glu Ala Ala Met Leu Trp Leu Glu Tyr Asn Thr Glu Ser		
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Arg Ser Gln Tyr Leu Ser Ser Val Leu Ser Gln Ile Arg Ile Asp Ala		
210	215	220
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225	230	235
Asp Lys Ser Val Val Gln Gly Leu Tyr Lys Ser Met Pro Lys Phe		
245	250	255
Phe Lys Pro Arg Leu Gly Met Thr Lys Glu Glu Met Met Ile Phe Ile		
260	265	270
Glu Ala Ser Ser Glu Asn Pro Cys Ser Leu Tyr Ser Ser Val Cys Tyr		
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Ser Pro Gln Ala Glu Lys Val Tyr Lys Leu Cys Ser Pro Pro Ala Asp		
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<210> 5003

<211> 3729

<212> DNA

<213> Homo sapiens

<400> 5003

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<210> 5004

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5004

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Asp Asp Leu Ser Thr Cys Asn Asp Leu Ile Ala Lys His Gly Ala Ala
35      40      45
Leu Gln Arg Ser Leu Asn Glu Leu Asp Gly Leu Lys Ile Pro Ser Glu
50      55      60
Ser Gly Glu Lys Leu Lys Val Val Asn Glu Arg Ala Thr Leu Phe Arg
65      70      75      80
Ile Thr Ser Asn Ala Met Ile Asn Ala Cys Arg Asp Phe Leu Glu Leu
85      90      95
Ala Glu Ile His Ser Arg Lys Trp Gln Arg Ala Leu Gln Tyr Glu Gln
100     105     110
Glu Gln Arg Val His Leu Glu Glu Thr Ile Glu Gln Leu Ala Lys Gln
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His Asn Ser Leu Glu Arg Ala Phe His Ser Ala Pro Gly Arg Pro Ala
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Glu Asp Ser Glu Glu Asp Glu Asp Thr Glu Tyr Phe Asp Ala Met Glu
165     170     175
Asp Ser Thr Ser Phe Ile Thr Val Ile Thr Glu Ala Lys Glu Asp Ser
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Arg Lys Ala Glu Gly Ser Thr Gly Thr Ser Ser Val Asp Trp Ser Ser
195     200     205
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Lys Val Lys Arg Arg Val Arg Ile Pro Asn Lys Pro Asn Tyr Ser Leu
225     230     235     240
Asn Leu Trp Ser Ile Met Lys Asn Cys Ile Gly Arg Glu Leu Ser Arg
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Ile Pro Met Pro Val Asn Phe Asn Glu Pro Leu Ser Met Leu Gln Arg
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Cys Thr Ser Ser Val Glu Gln Met Cys Leu Val Ala Ala Phe Ser Val
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Ser Ser Tyr Ser Thr Thr Val His Arg Ile Ala Lys Pro Phe Asn Pro
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Met Leu Gly Glu Thr Phe Glu Leu Asp Arg Leu Asp Asp Met Gly Leu
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Arg Ser Leu Cys Glu Gln Val Ser His His Pro Pro Ser Ala Ala His
340     345     350
Tyr Val Phe Ser Lys His Gly Trp Ser Leu Trp Gln Glu Ile Thr Ile
355     360     365
Ser Ser Lys Phe Arg Gly Lys Tyr Ile Ser Ile Met Pro Leu Gly Ala
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 Leu Ser Gly Ser Trp Asp Glu Gln Met Glu Cys Ser Lys Val Met His
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 Ser Ser Pro Ser Ser Pro Ser Ser Asp Gly Lys Gln Lys Thr Val Tyr
 485 490 495
 Gln Thr Leu Ser Ala Lys Leu Leu Trp Lys Lys Tyr Pro Leu Pro Glu
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 515 520 525
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 530 535 540
 Gln Arg Leu Met Glu Lys Gly Arg Trp Asp Glu Ala Asn Thr Glu Lys
 545 550 555 560
 Gln Arg Leu Glu Glu Lys Gln Arg Leu Ser Arg Arg Arg Arg Leu Glu
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 Ala Cys Gly Pro Gly Ser Ser Cys Ser Ser Glu Glu Gly Glu Ala Gly
 580 585 590
 Arg Glu Gly Arg Pro Gly Gly Glu Glu Arg Gly Ala Arg Val Gly Val
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<210> 5005

<211> 1120

<212> DNA

<213> Homo sapiens

<400> 5005

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<211> 165

<212> PRT

<213> Homo sapiens

<400> 5006

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Arg	Gly	Ser	Gly	His	Val	Thr	Val	Phe	Gly	Leu	Ser	Asn	Lys	Phe	Glu
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Ser	Glu	Phe	Pro	Ser	Ser	Leu	Thr	Gly	Lys	Val	Ala	Pro	Glu	Glu	Phe
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Lys	Ala	Ser	Ile	Asn	Arg	Val	Asn	Ser	Cys	Leu	Lys	Lys	Asn	Leu	Pro
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			100					105					110		
Arg	Ser	Ile	Glu	Lys	Leu	Leu	Glu	Trp	Glu	Asn	Asn	Arg	Leu	Tyr	His
		115					120						125		
Lys	Leu	Cys	Leu	His	Trp	Arg	Leu	Ser	Lys	Arg	Lys	Cys	Glu	Thr	Asn
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Asn	Met	Met	Glu	Tyr	Val	Ile	Leu	Ile	Glu	Phe	Leu	Pro	Lys	Thr	Pro
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Ile	Phe	Arg	Pro	Asp											
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<210> 5007
<211> 2165
<212> DNA
<213> Homo sapiens

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<210> 5008
<211> 487
<212> PRT
<213> Homo sapiens
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			20					25					30		
Ser	Met	Ala	Lys	Ile	His	Ala	Arg	Asn	Gly	Asp	Leu	Ser	Glu	Ala	Ala
		35					40					45			
Met	Cys	Tyr	Ile	His	Ile	Ala	Ala	Leu	Ile	Ala	Glu	Tyr	Leu	Lys	Arg
	50					55				60					
Lys	Gly	Met	Phe	Ser	Met	Gly	Trp	Pro	Ala	Val	Leu	Ser	Ile	Thr	Pro
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Asn	Ile	Lys	Glu	Glu	Gly	Ala	Met	Lys	Glu	Asp	Ser	Gly	Met	Gln	Asp
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Thr	Pro	Tyr	Asn	Glu	Asn	Ile	Leu	Val	Glu	Gln	Leu	Tyr	Met	Cys	Val
			100					105					110		
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	130					135					140				
Ser	Asp	Leu	Tyr	Tyr	Asp	Ile	His	Arg	Ser	Tyr	Leu	Lys	Val	Ala	Glu
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 260 265 270
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 355 360 365
 Ala Tyr Ala Arg Ala Phe Leu Glu Glu Thr Asn Ala Lys Lys Tyr Pro
 370 375 380
 Asp Asn Gln Val Lys Leu Leu Lys Glu Ile Phe Arg Gln Phe Ala Asp
 385 390 395 400
 Ala Cys Gly Gln Ala Leu Asp Val Asn Glu Arg Leu Ile Lys Glu Asp
 405 410 415
 Gln Leu Glu Tyr Gln Glu Glu Leu Arg Ser His Tyr Lys Asp Met Leu
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 Ser Glu Leu Ser Thr Val Met Asn Glu Gln Leu Cys Arg Gly Pro Cys
 435 440 445
 Leu Tyr Ser Phe Cys Ser Ser Val Ser Ser Ile Ser Leu Ser Thr Val
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<210> 5009

<211> 426

<212> DNA

<213> Homo sapiens

<400> 5009

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<210> 5010

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5010

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			20					25					30		
Asn	Leu	Pro	Gly	Arg	Val	His	Gln	Phe	Phe	Ile	Ser	Pro	Leu	Phe	Ile
			35				40					45			
Leu	Ser	Phe	Glu	Val	Ile	Leu	Ile	His	Phe	Leu	His	Leu	Gln	Pro	Pro
			50				55				60				
Val	Leu	Leu	Asp	Leu	Ala	Pro	Asn	Leu	Leu	Leu	Pro	Phe	Gly	Thr	Glu
65					70				75					80	
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<212> DNA

<213> Homo sapiens

<400> 5011

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<212> PRT

<213> Homo sapiens

<400> 5012

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<211> 2480

<212> DNA

<213> Homo sapiens

<400> 5013

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<211> 675

<212> PRT

<213> Homo sapiens

<400> 5014

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<211> 1360

<212> DNA

<213> Homo sapiens

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<210> 5016

<211> 284

<212> PRT

<213> Homo sapiens

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Glu	Trp	Val	Leu	Asn	Ile	Gly	Arg	Gly	Asn	Phe	Lys	Pro	Lys	Gln	His
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<212> PRT
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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 Pro His Gly Pro Pro Gly Pro Leu Gly Leu Leu Gly Val Arg Pro Gly
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 Phe Ile Ser Pro Glu Lys Tyr Asp Ile Lys Cys Ala Val Ser Glu Ala
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 Val Thr Ser Gly Met Val Lys Asp Pro Pro Asp Val Leu Asp Arg Gln
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<212> DNA

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<400> 5021

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<211> 124

<212> PRT

<213> Homo sapiens

<400> 5022

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Asn Ile His Gln Ser Leu Gln Asn Ile Thr Glu Asn Gln Leu Val Gln			
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<210> 5023

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<212> DNA

<213> Homo sapiens

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<211> 323

<212> PRT

<213> Homo sapiens

<400> 5024

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<212> DNA

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 <213> Homo sapiens

<400> 5026
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 20 25 30
 Arg Leu Asp Asn Arg Gly Ala Thr Lys Ile Leu Ala Asp Trp Trp Ala
 35 40 45
 Val Leu Asp Pro Lys Glu Lys Gln Lys Tyr Thr Asp Met Ala Lys Glu
 50 55 60
 Tyr Lys Asp Ala Phe Met Lys Ala Asn Pro Gly Tyr Lys Trp Cys Pro
 65 70 75 80
 Thr Thr Asn Lys Pro Val Lys Ser Pro His Pro Leu Ser Ile His Glu
 85 90 95
 Arg Asn Phe Gly Pro Ser His Leu Thr Leu Gln Glu Thr Cys Gln Ala
 100 105 110
 Pro Arg Lys Gln Arg Leu Lys Lys Cys Leu Ser Leu Thr Leu Glu Trp
 115 120 125
 Leu Ile Leu Leu Lys Trp Glu Ala
 130 135

<210> 5027
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 5027
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 cagcgggcgc agcggggaca tgggtggcagt gcgggcaaga cgcacaagtt ctctgccggc
 120
 acctaccgcg gcttgaggga gtaccgccgg ggcattcttag gagactggtc caacgctatc
 180
 tccgcgtctt actgcagggtg cagctgatgc attgctggtc tctcatctgc agcttcaca
 240

gagtgccaaag cccctcactc agcccatccc tgggctctgc tccggggccc caagaccag
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 359

<210> 5028

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5028

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Gln	Gly	Gln	Gln	Gln	Arg	Ala	Gln	Arg	Gly	His	Gly	Gly	Ser	Ala	Gly
		20					25						30		
Lys	Thr	His	Lys	Phe	Ser	Ala	Gly	Thr	Tyr	Pro	Arg	Leu	Glu	Glu	Tyr
		35					40					45			
Arg	Arg	Gly	Ile	Leu	Gly	Asp	Trp	Ser	Asn	Ala	Ile	Ser	Ala	Leu	Tyr
	50					55					60				
Cys	Arg	Cys	Ser												
65															

<210> 5029

<211> 1440

<212> DNA

<213> Homo sapiens

<400> 5029

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 120
 ttcatgtgtg ctgatatttt tggatcattt gtttactcgt tttttgagtt tacctgattt
 180
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 240
 gggtaacttta ttttagttgg attttctaata tggccttata tgggaagtagt tctctttgtg
 300
 gttattttga tcttctgctt gatgacactg ataggaaacc tgttcatcat catcctgacg
 360
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 420
 gatctctgct acaccaccag ctctatccct cagttgctgg tcagtctctg ggggtgtggaa
 480
 aagaccattt cttatgctgg ttgcatggtt caactttact tttttctcac actgggaacc
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 660
 gtaagtgggt ttacaaaccc agcacttcat tctccttca cttctgggtt acctctgtgt
 720
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 780

gtcaataccc gtgaaaataa actgaccctc atgatacaca gctccatttt tgttctgcta
 840
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 1020
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 1080
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 1140
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 1200
 ctgttcattt atcaaccatt cttttattca ctactctgt tagcacttgc tgagcatgta
 1260
 ctctaacaaa gtcgtggaga tcctggtaac aggtaggaat aaaacacatt cagcttaaat
 1320
 accattcact tttggagaaa acagctgtgt aaaatcaaga taaaacatct atagtgtgt
 1380
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 1440

<210> 5030

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5030

Met	Asn	Asp	Asp	Gly	Lys	Val	Asn	Ala	Ser	Ser	Glu	Gly	Tyr	Phe	Ile
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Leu	Val	Gly	Phe	Ser	Asn	Trp	Pro	Tyr	Leu	Glu	Val	Val	Leu	Phe	Val
		20						25					30		
Val	Ile	Leu	Ile	Phe	Cys	Leu	Met	Thr	Leu	Ile	Gly	Asn	Leu	Phe	Ile
		35					40					45			
Ile	Ile	Leu	Thr	Tyr	Leu	Asp	Ser	His	Leu	His	Thr	Pro	Leu	Tyr	Phe
	50					55					60				
Phe	Leu	Ser	Asn	Leu	Ser	Phe	Leu	Asp	Leu	Cys	Tyr	Thr	Thr	Ser	Ser
65				70						75				80	
Ile	Pro	Gln	Leu	Leu	Val	Ser	Leu	Trp	Gly	Val	Glu	Lys	Thr	Ile	Ser
			85						90					95	
Tyr	Ala	Gly	Cys	Met	Val	Gln	Leu	Tyr	Phe	Phe	Leu	Thr	Leu	Gly	Thr
		100						105					110		
Thr	Glu	Cys	Val	Leu	Leu	Val	Val	Met	Ser	Tyr	Asp	Arg	Tyr	Ala	Ala
		115					120					125			
Val	Cys	Arg	Pro	Leu	His	Tyr	Thr	Val	Leu	Met	His	Ser	Arg	Phe	Cys
		130				135					140				
His	Leu	Leu	Ala	Val	Ala	Ser	Trp	Val	Ser	Gly	Phe	Thr	Asn	Pro	Ala
145					150					155				160	
Leu	His	Ser	Ser	Phe	Thr	Phe	Trp	Val	Pro	Leu	Cys	Gly	His	Arg	Gln
			165					170						175	
Ile	Asp	His	Phe	Phe	Cys	Glu	Val	Pro	Ala	Leu	Leu				
			180					185							

<210> 5031
 <211> 505
 <212> DNA
 <213> Homo sapiens

<400> 5031
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 120
 gaggggccaag aggagggcgg tggactggca tgccttgag cgtcccaaag gctgcatggg
 180
 ggtccttgcc cgggaggcgc cccacctaga gaaacagccg gcagccggcc cgcagcgcgct
 240
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 300
 tgaattcatg gactatactt caagtcagtg tgggaaatat tattcatctg tgccagagga
 360
 aggaggggca acccatgtct atcgttatca cagaggcgag tcgaagctgc acatgtgctt
 420
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 480
 ctatcaaata tcagagcatg ctcca
 505

<210> 5032
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 5032
 Met Asp Asn Cys Leu Ala Ala Ala Leu Asn Gly Val Asp Arg Arg
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 Ser Leu Gln Arg Ser Ala Arg Leu Ala Leu Glu Val Leu Glu Arg Ala
 20 25 30
 Lys Arg Arg Ala Val Asp Trp His Ala Leu Glu Arg Pro Lys Gly Cys
 35 40 45
 Met Gly Val Leu Ala Arg Glu Ala Pro His Leu Glu Lys Gln Pro Ala
 50 55 60
 Ala Gly Pro Gln Arg Val Leu Pro Gly Glu Arg Glu Glu Arg Pro Pro
 65 70 75 80
 Thr Leu Ser Ala Ser Phe Arg Thr Met Ala Glu Phe Met Asp Tyr Thr
 85 90 95
 Ser Ser Gln Cys Gly Lys Tyr Tyr Ser Ser Val Pro Glu Glu Gly Gly
 100 105 110
 Ala Thr His Val Tyr Arg Tyr His Arg Gly Glu Ser Lys Leu His Met
 115 120 125
 Cys Leu Asp Ile Gly Asn Gly Gln Arg Lys Asp Arg Lys Lys Thr Ser
 130 135 140
 Leu Gly Pro Gly Gly Ser Tyr Gln Ile Ser Glu His Ala Pro
 145 150 155

<210> 5033
 <211> 2888

<212> DNA

<213> Homo sapiens

<400> 5033

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120
tcccactgca gcgctctgtga caactgtgta gaggtgactg ggaagttccg cgggggtgtg
180
aaccctttca cccgaggctg ctgtgggaat gtggagcacg tgctgtgtag cccctggcg
240
ccccggtacg tgggtggagcc acccggctg ccgctcgcg tgagtttgaa gccgccttc
300
cttaggcctg aactcctgga ccgagctgca ccgctcaagg tcaagcttag tgacaacggg
360
ctgaaggctg gcctgggccc tagcaagtcc aagggcagcc tggaccggct ggatgagaag
420
ccactggact tggggccacc actgcccccc aagatagagg ctggcacgtt cagcagtgc
480
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540
ccgacacctg ccattgtaca gtttaggcg gctttcccca cgggtcccaa ggtgcccttc
600
tgtggaccag gcgagcaggt tccagccct gattccctga cctggggga cgacaacatc
660
cgtagcctgg actttgtgtc cgagccgagc ctggacctcc ctgactatgg gccagggggc
720
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780
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1500

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1920
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2280
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2340
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2640
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2700
gcacactggg gaggggtcag tgcttccctt ggtgtcaggg acctgagagt aagcacatga
2760
cagcgtctgc ttgcgttgtg tctgttttat gtttttatat ctacatctat atatctataa
2820
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2880
aaaaaaaa
2888

<210> 5034

<211> 550

<212> PRT

<213> Homo sapiens

<400> 5034

Xaa Asp Glu Asp Lys Glu Asp Asp Phe Arg Ala Pro Leu Tyr Lys Asn
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 Val Asp Val Arg Gly Ile Gln Val Arg Met Lys Trp Cys Ala Thr Cys
 20 25 30
 His Phe Tyr Arg Pro Pro Arg Cys Ser His Cys Ser Val Cys Asp Asn
 35 40 45
 Cys Val Glu Val Thr Gly Lys Phe Arg Gly Gly Val Asn Pro Phe Thr
 50 55 60
 Arg Gly Cys Cys Gly Asn Val Glu His Val Leu Cys Ser Pro Leu Ala
 65 70 75 80
 Pro Arg Tyr Val Val Glu Pro Pro Arg Leu Pro Leu Ala Val Ser Leu
 85 90 95
 Lys Pro Pro Phe Leu Arg Pro Glu Leu Leu Asp Arg Ala Ala Pro Leu
 100 105 110
 Lys Val Lys Leu Ser Asp Asn Gly Leu Lys Ala Gly Leu Gly Arg Ser
 115 120 125
 Lys Ser Lys Gly Ser Leu Asp Arg Leu Asp Glu Lys Pro Leu Asp Leu
 130 135 140
 Gly Pro Pro Leu Pro Pro Lys Ile Glu Ala Gly Thr Phe Ser Ser Asp
 145 150 155 160
 Leu Gln Thr Pro Arg Pro Gly Ser Ala Glu Ser Ala Leu Ser Val Gln
 165 170 175
 Arg Thr Ser Pro Pro Thr Pro Ala Met Tyr Lys Phe Arg Pro Ala Phe
 180 185 190
 Pro Thr Gly Pro Lys Val Pro Phe Cys Gly Pro Gly Glu Gln Val Pro
 195 200 205
 Gly Pro Asp Ser Leu Thr Leu Gly Asp Asp Asn Ile Arg Ser Leu Asp
 210 215 220
 Phe Val Ser Glu Pro Ser Leu Asp Leu Pro Asp Tyr Gly Pro Gly Gly
 225 230 235 240
 Leu His Ala Ala Tyr Pro Pro Ser Pro Pro Leu Ser Ala Ser Asp Ala
 245 250 255
 Phe Ser Gly Ala Leu Arg Ser Leu Ser Leu Lys Ala Ser Ser Arg Arg
 260 265 270
 Gly Gly Asp His Val Ala Leu Gln Pro Leu Arg Ser Glu Gly Gly Pro
 275 280 285
 Pro Thr Pro His Arg Ser Ile Phe Ala Pro His Ala Leu Pro Asn Arg
 290 295 300
 Asn Gly Ser Leu Ser Tyr Asp Ser Leu Leu Asn Pro Gly Ser Pro Gly
 305 310 315 320
 Gly His Ala Cys Pro Ala His Pro Ala Val Gly Val Ala Gly Tyr His
 325 330 335
 Ser Pro Tyr Leu His Pro Gly Ala Thr Gly Asp Pro Pro Arg Pro Leu
 340 345 350
 Pro Arg Ser Phe Ser Pro Val Leu Gly Pro Arg Pro Arg Glu Pro Ser
 355 360 365
 Pro Val Arg Tyr Asp Asn Leu Ser Arg Thr Ile Met Ala Ser Ile Gln
 370 375 380
 Glu Arg Lys Asp Arg Glu Glu Arg Glu Arg Leu Leu Arg Ser Gln Ala
 385 390 395 400
 Asp Ser Leu Phe Gly Asp Ser Gly Val Tyr Asp Ala Pro Ser Ser Tyr
 405 410 415
 Ser Leu Gln Gln Ala Ser Val Leu Ser Glu Gly Pro Arg Gly Pro Ala

	420		425		430
Leu Arg Tyr Gly Ser Arg Asp Asp	Leu Val Ala Gly Pro Gly Phe Gly				
435	440	445			
Gly Ala Arg Asn Pro Ala Leu Gln Thr Ser Leu Ser Ser Leu Ser Ser					
450	455	460			
Ser Val Ser Arg Ala Pro Arg Thr Ser Ser Ser Ser Leu Gln Ala Asp					
465	470	475	480		
Gln Ala Ser Ser Asn Ala Pro Gly Ala Pro Ala Gln Gln Trp Leu Thr					
485	490	495			
Gln Val Thr Cys Thr Pro Gly Pro Ala Leu Pro Ala Arg His Ser Pro					
500	505	510			
Leu Thr Ile Leu Arg Gly Pro Gln Ser Cys Arg Leu His Pro His Gly					
515	520	525			
Pro Pro Arg Ala Thr Ala Leu Ala Asp Arg Ala Glu Gly Pro Pro Ser					
530	535	540			
Ala Glu Asp Ser Pro Lys					
545	550				

<210> 5035

<211> 2002

<212> DNA

<213> Homo sapiens

<400> 5035

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120

cttgatgccc actttgaaaa cttcttgccc cgggcagaca gcaccaagaa ctggacagag
180

aagatcttga ggcagacaga ggtgctgctg cagcccaacc ccagtgcccg agtggaggag
240

ttcctgtatg agaagctgga caggaaggtc ccctcaaggg tcaccaacgg ggagctgctg
300

gctcagtaca tggcagacgc ggccagttag ctggggccga ccaccccta tgggaagaca
360

ctgatcaagg tggcagaagc tgaaaagcaa ctgggagccg cggagagggga ttttatccac
420

acggcctcca tcagcttctt cacacccttg cgcaacttcc tggaggggga ctggaagacc
480

atctcgaagg agagtgggt cctccaaaac cggcgctctg acttggtatgc ctgcaaagcg
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600

aaggccgagc aggagctccg cgtggcccag acagagtttg accggcaagc agaagtgacc
660

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720

ttcgtcaagt ctacagaaac ctactacgca cagtgtctacc gccacatgct ggacttgacg
780

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 1860
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 1980
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 2002

<210> 5036

<211> 384

<212> PRT

<213> Homo sapiens

<400> 5036

Arg	Pro	Cys	Gly	His	Ala	Met	Asp	Phe	Asn	Met	Lys	Lys	Leu	Ala	Ser
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Asp	Ala	Gly	Ile	Phe	Phe	Thr	Arg	Ala	Val	Gln	Phe	Thr	Glu	Glu	Lys
			20					25				30			
Phe	Gly	Gln	Ala	Glu	Lys	Thr	Glu	Leu	Asp	Ala	His	Phe	Glu	Asn	Leu
		35					40					45			
Leu	Ala	Arg	Ala	Asp	Ser	Thr	Lys	Asn	Trp	Thr	Glu	Lys	Ile	Leu	Arg
	50					55					60				
Gln	Thr	Glu	Val	Leu	Leu	Gln	Pro	Asn	Pro	Ser	Ala	Arg	Val	Glu	Glu

65					70					75				80	
Phe	Leu	Tyr	Glu	Lys	Leu	Asp	Arg	Lys	Val	Pro	Ser	Arg	Val	Thr	Asn
				85					90					95	
Gly	Glu	Leu	Leu	Ala	Gln	Tyr	Met	Ala	Asp	Ala	Ala	Ser	Glu	Leu	Gly
			100					105					110		
Pro	Thr	Thr	Pro	Tyr	Gly	Lys	Thr	Leu	Ile	Lys	Val	Ala	Glu	Ala	Glu
		115					120					125			
Lys	Gln	Leu	Gly	Ala	Ala	Glu	Arg	Asp	Phe	Ile	His	Thr	Ala	Ser	Ile
	130					135					140				
Ser	Phe	Leu	Thr	Pro	Leu	Arg	Asn	Phe	Leu	Glu	Gly	Asp	Trp	Lys	Thr
145					150					155				160	
Ile	Ser	Lys	Glu	Ser	Arg	Leu	Leu	Gln	Asn	Arg	Arg	Leu	Asp	Leu	Asp
			165					170					175		
Ala	Cys	Lys	Ala	Arg	Leu	Lys	Lys	Ala	Lys	Ala	Ala	Glu	Ala	Lys	Ala
			180					185					190		
Thr	Leu	Trp	Asn	Asp	Glu	Val	Asp	Lys	Ala	Glu	Gln	Glu	Leu	Arg	Val
	195						200					205			
Ala	Gln	Thr	Glu	Phe	Asp	Arg	Gln	Ala	Glu	Val	Thr	Arg	Leu	Leu	Leu
	210					215					220				
Glu	Gly	Ile	Ser	Ser	Thr	His	Val	Asn	His	Leu	Arg	Cys	Leu	His	Glu
225					230					235				240	
Phe	Val	Lys	Ser	Gln	Thr	Thr	Tyr	Tyr	Ala	Gln	Cys	Tyr	Arg	His	Met
			245						250					255	
Leu	Asp	Leu	Gln	Lys	Gln	Leu	Gly	Ser	Ser	Gln	Gly	Ala	Ile	Ser	Arg
		260					265						270		
His	Leu	Arg	Gly	His	His	Arg	Ala	Arg	Leu	Pro	Pro	Leu	Ser	Ser	Thr
	275						280					285			
Ser	Pro	Thr	Thr	Ala	Ala	Ala	Thr	Met	Pro	Val	Val	Pro	Ser	Val	Ala
	290					295					300				
Ser	Leu	Ala	Pro	Pro	Gly	Glu	Ala	Ser	Leu	Cys	Leu	Glu	Glu	Val	Ala
305					310					315				320	
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			325						330					335	
Ala	Ala	Asp	Ser	Ser	Glu	Leu	Ala	Leu	Leu	Ala	Asp	Glu	Leu	Ile	Thr
			340				345					350			
Val	Tyr	Ser	Leu	Pro	Gly	Met	Asp	Pro	Asp	Trp	Leu	Ile	Gly	Glu	Arg
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<211> 2102

<212> DNA

<213> Homo sapiens

<400> 5037

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<211> 533

<212> PRT

<213> Homo sapiens

<400> 5038

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Pro	Glu	Ser	Leu	Cys	Ala	Gln	Lys	Leu	Lys	Met	Asp	His	Val	Met	Asp
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Val	Val	Val	Lys	Ser	Val	Asn	Trp	Ile	Cys	Ser	Arg	Gly	Leu	Asn	His
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Ser	Glu	Phe	Thr	Thr	Leu	Leu	Tyr	Glu	Leu	Asp	Ser	Gln	Tyr	Gly	Ser
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 Ser Asp Gly Leu Asn Tyr Ile Pro Lys Ile Ala Glu Leu Lys Thr Glu
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 Lys Tyr Asp Lys Val Gly Ile Pro Glu Phe Tyr Lys Tyr Leu Trp Gly
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 Ser Tyr Pro Lys Tyr Lys His His Cys Ala Lys Ile Leu Ser Met Phe
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<210> 5039

<211> 3059

<212> DNA

<213> Homo sapiens

<400> 5039

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<210> 5040

<211> 616

<212> PRT

<213> Homo sapiens

<400> 5040

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			20					25					30		
Tyr	Leu	Gly	Ser	Gly	Gly	Trp	Arg	Phe	Ile	Arg	Val	Phe	Ile	Lys	Thr
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Ile	Arg	Arg	Asp	Ile	Phe	Gly	Gly	Leu	Val	Leu	Leu	Lys	Val	Lys	Ala
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Lys	Val	Arg	Gln	Cys	Leu	Gln	Glu	Arg	Arg	Thr	Val	Pro	Ile	Leu	Phe
65				70					75					80	
Ala	Ser	Thr	Val	Arg	Arg	His	Pro	Asp	Lys	Thr	Ala	Leu	Ile	Phe	Glu
			85					90					95		
Gly	Thr	Asp	Thr	His	Trp	Thr	Phe	Arg	Gln	Leu	Asp	Glu	Tyr	Ser	Ser
		100				105					110				
Ser	Val	Ala	Asn	Phe	Leu	Gln	Ala	Arg	Gly	Leu	Ala	Ser	Gly	Asp	Val

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Gly Ala Val Pro Pro Ser Thr Glu His Leu Asp Pro Leu Leu Lys Asp		
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Ala Pro Lys His Leu Pro Ser Cys Pro Asp Lys Gly Phe Thr Asp Lys		
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Leu Phe Tyr Ile Tyr Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala		
245	250	255
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275	280	285
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<210> 5041

<211> 2461

<212> DNA

<213> Homo sapiens

<400> 5041

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<210> 5042

<211> 686

<212> PRT

<213> Homo sapiens

<400> 5042

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 Asp Arg Leu Arg Gln Arg Gly Leu Glu Gln Arg Cys Leu Arg Leu Ser
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 Ala Arg Glu Ala Ser Glu Glu Glu Leu Gly Leu Val His Ser Pro Glu
 65 70 75 80
 Tyr Val Ser Leu Val Arg Glu Thr Gln Val Leu Gly Lys Glu Glu Leu
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 Asn Asn Val Ala Ile Ala Ala Ala His Ala Lys Gln Lys His Gly Leu
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Gly Gln Leu Asp Arg Pro Pro Asp Leu Ala His Asp Gly Arg Ser Leu		
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Trp Leu Asn Ile Arg Gly Lys Glu Ala Ala Ala Leu Ser Met Phe His		
545	550	555
Val Ser Thr Pro Leu Pro Val Met Thr Gly Gly Phe Leu Ser Cys Ile		
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580	585	590
Leu Val Ala Leu Gly Pro Gly His Gly Leu Gln Gly Pro His Ala Ala		
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Leu Leu Ala Ala Met Leu Arg Gly Leu Ala Gly Gly Arg Val Leu Ala		
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Leu Leu Glu Glu Asn Ser Thr Pro Gln Leu Ala Gly Ile Leu Ala Arg		
625	630	635
Val Leu Asn Gly Glu Ala Pro Pro Ser Leu Gly Pro Ser Ser Val Ala		
645	650	655
Ser Pro Glu Asp Val Gln Ala Leu Met Tyr Leu Arg Gly Gln Leu Glu		
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<210> 5043

<211> 1824

<212> DNA

<213> Homo sapiens

<400> 5043

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<210> 5044

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5044

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Arg Arg Asn Val Arg Lys Gly Tyr Lys Pro Leu Ser Lys Gln Lys Ser			
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Gln Leu His Gln Lys Leu Thr Glu Thr Gln Gly Glu Leu Lys Asp Leu			
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Thr Gln Lys Val Glu Leu Leu Glu Lys Phe Arg Asp Asn Cys Leu Ala			
165	170	175	
Ile Leu Glu Ser Lys Gly Leu Asp Pro Ala Leu Gly Ser Glu Thr Leu			
180	185	190	
Ala Ser Arg Gln Glu Ser Thr Thr Asp His Met Asp Ser Met Leu Leu			
195	200	205	
Leu Glu Thr Leu Gln Glu Glu Leu Lys Leu Phe Asn Glu Thr Ala Lys			
210	215	220	
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225	230	235	240
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<211> 462

<212> DNA

<213> Homo sapiens

<400> 5045

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<210> 5046
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 <213> Homo sapiens

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<210> 5048

<211> 429

<212> PRT

<213> Homo sapiens

<400> 5048

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<210> 5049

<211> 2422

<212> DNA

<213> Homo sapiens

<400> 5049

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<211> 4125

<212> DNA

<213> Homo sapiens

<400> 5051

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<212> PRT

<213> Homo sapiens

<400> 5052

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Lys	Ile	Tyr	Trp	Phe	Lys	Asp	Gly	Lys	Gln	Ile	Ser	Pro	Lys	Ser
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 5056

<211> 672

<212> PRT

<213> Homo sapiens

<400> 5056

Met	Glu	Ser	Arg	Lys	Leu	Ile	Ser	Ala	Thr	Asp	Ile	Gln	Tyr	Ser	Gly
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Ser	Leu	Leu	Asn	Ser	Leu	Asn	Glu	Gln	Arg	Gly	His	Gly	Leu	Phe	Cys
			20					25					30		
Asp	Val	Thr	Val	Ile	Val	Glu	Asp	Arg	Lys	Phe	Arg	Ala	His	Lys	Asn
		35					40					45			
Ile	Leu	Ser	Ala	Ser	Ser	Thr	Tyr	Phe	His	Gln	Leu	Phe	Ser	Val	Ala
		50				55					60				
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4242

<210> 5057
<211> 673
<212> DNA
<213> Homo sapiens

<210> 5058

<211> 122

<212> PRT

<213> Homo sapiens

<400> 5058

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 20           25           30
Ser Cys Pro Lys Val Asn Ser Val Tyr Val Leu Val Arg Gln Lys Ala
 35           40           45
Gly Gln Thr Pro Gln Glu Arg Val Glu Glu Val Leu Ser Gly Lys Leu
 50           55           60
Phe Asp Arg Leu Arg Asp Glu Asn Pro Asp Phe Arg Glu Lys Ile Ile
 65           70           75           80
Ala Ile Asn Ser Glu Leu Thr Gln Pro Lys Leu Ala Leu Ser Glu Glu
 85           90           95
Asp Lys Glu Val Ile Ile Asp Ser Thr Asn Ile Ile Phe His Cys Ala
 100          105          110
Ala Thr Val Arg Phe Asn Glu Asn Leu Arg
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<210> 5059

<211> 480

<212> DNA

<213> Homo sapiens

<400> 5059

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120
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<210> 5060

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5060

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Met Ala Ser Pro Leu Leu Pro Leu Leu Pro Ile Ser Leu Pro Ala
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Phe Ala Ser Trp Leu Ser Leu Asp Ile Met Thr Gly Gly Leu Ala Pro

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	20		25		30										
Leu	Pro	His	Thr	Leu	Pro	Ala	Phe	Leu	Pro	His	Cys	Leu	Glu	Asp	Leu
	35				40				45						
Leu	Arg	Ala	Trp	Val	Leu	Val	Ile	Gly	Ser	Ala	Pro	Arg	Ala	Gly	Cys
	50				55				60						
Arg	Leu	Ser	Leu	Glu	Lys	Asp	Ser	Gln	Leu	Val	Ser	Leu	Cys	Ile	His
	65				70				75					80	
Ala	Leu	Cys	Pro	Glu	Arg	Pro	Ser	Gln	Ser	Ala	Arg	Ala	Val	Ile	Thr
		85						90					95		
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Leu	Glu														

<210> 5061

<211> 2462

<212> DNA

<213> Homo sapiens

<400> 5061

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 840
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<210> 5062

<211> 136

<212> PRT

<213> Homo sapiens

<400> 5062

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      20           25           30
Val Arg Arg Ser Pro Ser Ser Arg Phe Ser Phe Phe Pro Pro Gln Gln
      35           40           45
Arg Asn Trp Arg Lys Asp Ile Lys Leu Ser Ala Val Asp Leu Ser Ala
      50           55           60
Glu Ile Phe Pro Glu Ser Met Val Val Leu Asn Tyr Leu His Val Ser
      65           70           75           80
Ser Ile Phe Asn Ser Gly Val Gly Leu Phe Leu Ile Ser Ser Gln Lys
      85           90           95
Cys Ser Ala Leu Gly Glu Gly Thr Ser Pro Leu Ala Cys His Phe Pro
      100          105          110
Gly Val Leu Tyr His Phe Asp Gly Thr Leu Trp Ser Ala Glu Asn Ala
      115          120          125
Leu Ser Trp His Ala Ser Arg Leu
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<210> 5063

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5063

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420
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<210> 5064

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5064

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 20 25 30
 Ala Arg Lys Tyr Trp Leu Thr Cys Phe Glu Glu Ala Leu Asp Gly Val
 35 40 45
 Val Lys Arg Ala Val Ala Ser Gln Pro Asp Ser Val Asp Ala Ala Glu
 50 55 60
 Arg Ala Glu Lys Phe Arg Gln Lys Tyr Trp Asn Lys Leu Gln Thr Leu
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 Arg Gln Gln Pro Phe Ala Tyr Gly Thr Leu Thr Val Arg Ser Leu Leu
 85 90 95
 Asp Thr Arg Glu His Cys Leu Asn Glu Phe Asn Phe Pro Asp
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<210> 5065

<211> 370

<212> DNA

<213> Homo sapiens

<400> 5065

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<210> 5066

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5066

Ile Glu Asp Ala Arg Glu Arg Met Arg Thr Leu Arg Lys Leu Ile Arg
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 20 25 30
 Leu Lys Thr Ile Ala Asp His Ser Glu Lys Asn Lys Met Glu Pro Arg
 35 40 45
 Asn Leu Ala Leu Val Phe Gly Pro Thr Leu Val Arg Thr Ser Glu Asp
 50 55 60
 Asn Met Thr Asp Met Val Thr His Met Pro Asp Arg Tyr Lys Ile Val
 65 70 75 80
 Glu Thr Leu Ile Gln His Ser Asp Trp Phe Phe Ser Asp Glu Glu Asp

85 90 95
 Lys Gly Glu Arg Ile Leu Pro Pro Val Val Gln Ser Ser Pro Arg Val
 100 105 110
 Arg Gly Pro Pro Arg Arg Ser Arg Thr Pro Gly
 115 120

<210> 5067
 <211> 2023
 <212> DNA
 <213> Homo sapiens

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 2023

<210> 5068

<211> 179

<212> PRT

<213> Homo sapiens

<400> 5068

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		20					25					30			
Ala	Leu	Gln	Asn	Glu	Arg	Thr	Glu	Arg	Ile	Arg	Ser	Leu	Leu	Glu	Arg
		35					40					45			
Gln	Ala	Arg	Glu	Ile	Glu	Ala	Phe	Asp	Ser	Glu	Ser	Met	Arg	Leu	Gly
	50					55				60					
Phe	Ser	Asn	Met	Val	Leu	Ser	Asn	Leu	Ser	Pro	Glu	Ala	Phe	Ser	His
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Ser	Tyr	Pro	Gly	Ala	Ser	Gly	Trp	Ser	His	Asn	Pro	Thr	Gly	Gly	Pro
			85					90					95		
Gly	Pro	His	Trp	Gly	His	Pro	Met	Gly	Gly	Pro	Pro	Gln	Ala	Trp	Gly
		100					105					110			
His	Pro	Met	Gln	Gly	Gly	Pro	Gln	Pro	Trp	Gly	His	Pro	Ser	Gly	Pro
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	130					135					140				
Gln	Ala	Leu	Arg	Arg	Thr	Ala	Ser	Gly	Gly	Arg	Thr	Glu	Gln	Gly	Met
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165 170 175

Ser Tyr Thr

<210> 5069
<211> 3655
<212> DNA
<213> Homo sapiens

<400> 5069
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<210> 5070

<211> 255

<212> PRT

<213> Homo sapiens

<400> 5070

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Val Pro Glu Ile Phe Leu Glu Glu Arg Gly Arg Thr Leu Pro Val Phe		
210	215	220
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<211> 2196

<212> DNA

<213> Homo sapiens

<400> 5071

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<211> 76

<212> PRT

<213> Homo sapiens

<400> 5072

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Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Arg	Phe	Lys	Gln	Phe	Ser	His	Leu
		20						25					30		
Ser	Leu	Gln	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Gln	Pro	Cys	Pro	Ala
		35					40					45			
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<210> 5073

<211> 1712

<212> DNA

<213> Homo sapiens

<400> 5073

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<211> 240

<212> PRT

<213> Homo sapiens

<400> 5074

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65				70					75					80	
Val	Gln	Lys	Ala	Arg	Leu	Glu	Glu	Ser	Lys	Glu	Gln	Val	Ala	Ala	Met
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Gln	Ala	Gly	Leu	Leu	Lys	Val	Val	Pro	Gln	Ala	Val	Leu	Asp	Leu	Leu
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Thr	Trp	Gln	Glu	Leu	Glu	Lys	Lys	Val	Cys	Gly	Asp	Pro	Glu	Val	Thr
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Val	Asp	Ala	Leu	Arg	Lys	Leu	Thr	Arg	Phe	Glu	Asp	Phe	Glu	Pro	Ser
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Asp	Ser	Arg	Val	Gln	Tyr	Phe	Trp	Glu	Ala	Leu	Asn	Asn	Phe	Thr	Asn
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Glu	Asp	Arg	Ser	Arg	Phe	Leu	Arg	Phe	Val	Thr	Gly	Arg	Ser	Arg	Leu
			165					170					175		
Pro	Ala	Arg	Xaa	Ser	Thr	Ser	Thr	Gln	Thr	Ser	Trp	Ala	Thr	Arg	Pro
			180					185					190		
Xaa	Asp	Ala	Leu	Pro	Glu	Ser	Ser	Thr	Cys	Ser	Ser	Thr	Leu	Phe	Leu
	195					200						205			
Pro	His	Tyr	Ala	Ser	Ala	Lys	Val	Cys	Glu	Glu	Lys	Leu	Arg	Tyr	Ala
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<210> 5075

<211> 444

<212> DNA

<213> Homo sapiens

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<210> 5076

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<212> PRT

<213> Homo sapiens

<400> 5076

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			20					25					30		
Cys	Trp	Asp	Gly	Gly	Gly	Ser	Gly	Asn	Phe	Ser	Ser	Pro	Gly	Thr	Leu
		35					40					45			
Arg	Glu	Thr	Glu	Val	Ile	Thr	Ala	Val	Leu	Glu	Leu	Gly	Arg	Gly	Gly
	50					55				60					
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<211> 2352

<212> DNA

<213> Homo sapiens

<400> 5077

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<210> 5078

<211> 558

<212> PRT

<213> Homo sapiens

<400> 5078

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			20						25				30		
Leu	Gln	Gln	Phe	Asp	Phe	Asn	Val	Asp	Lys	Ala	Val	Gln	Ala	Phe	Val
			35				40					45			
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	50					55					60				
Lys	Lys	Asn	Asn	Lys	Arg	Lys	Arg	Ser	Lys	Ser	Lys	Gln	His	Gln	Gly
	65				70					75				80	
Asn	Lys	Asp	Ala	Lys	Asp	Lys	Val	Glu	Arg	Pro	Glu	Ala	Gly	Pro	Leu
			85						90					95	
Gln	Pro	Gln	Pro	Pro	Gln	Ile	Gln	Asn	Gly	Pro	Met	Asn	Gly	Cys	Glu
			100					105					110		
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 Pro Ser His Gln Thr Met Pro Ala Asn Lys Gln Asn Gly Ser Ser Asn
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 Gln Arg Arg Arg Phe Asn Pro Gln Tyr His Asn Asn Arg Leu Asn Gly
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 Pro Ala Lys Ser Gln Gly Ser Gly Asn Glu Ala Glu Pro Leu Gly Lys
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 Gly Asn Ser Arg His Glu His Arg Arg Gln Pro His Asn Gly Phe Arg
 465 470 475 480
 Pro Lys Asn Lys Gly Gly Ala Lys Asn Gln Glu Ala Ser Leu Gly Met
 485 490 495
 Lys Thr Pro Glu Ala Pro Ala His Ser Glu Lys Pro Arg Arg Arg Gln
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 His Ala Ala Asp Thr Ser Glu Ala Arg Pro Phe Arg Gly Ser Val Gly
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<210> 5079

<211> 1338

<212> DNA

<213> Homo sapiens

<400> 5079

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<211> 165

<212> PRT

<213> Homo sapiens

<400> 5080

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		20						25					30		
Gly	Gly	Asp	Ser	Gly	Arg	Arg	Asn	Met	Ala	Val	Ala	Asp	Leu	Ala	Leu
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Ile	Pro	Asp	Val	Asp	Ile	Asp	Ser	Asp	Gly	Val	Phe	Lys	Tyr	Val	Leu
	50					55					60				
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65					70					75				80	
Lys	Glu	Ile	Val	Arg	Gly	Tyr	Lys	Trp	Ala	Glu	Tyr	His	Ala	Asp	Ile

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 Tyr Asp Lys Val Ser Gly Asp Met Gln Lys Gln Gly Cys Asp Cys Glu
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 Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp Lys Lys Ile
 115 120 125
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 Arg Arg Pro Gln Tyr Gln Leu Arg Gly Pro Pro Glu Pro Ala Ala Leu
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 Thr Arg Gly Pro Ser
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<210> 5081

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5081

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<210> 5082

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5082

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 Ala Ala Gln Ala Trp His Cys Pro Pro Gly Gln Gly His Ser Val Trp
 20 25 30
 Asp Ala Val Arg Met Pro Leu Gly Ala Gly Thr Pro Val Asn Val Gln
 35 40 45
 Arg Arg Glu Asp Ser Ala Thr Glu Gly Ser His Arg Leu Ile Leu Ala
 50 55 60
 Ala Asn Arg Asp Glu Phe Tyr Ser Arg Pro Ser Lys Leu Ala Asp Phe

65		70		75		80									
Trp	Gly	Asn	Asn	Asn	Glu	Ile	Leu	Ser	Gly	Leu	Asp	Met	Glu	Glu	Gly
			85					90					95		
Lys	Glu	Gly	Gly	Thr	Trp	Leu	Gly	Ile	Ser	Thr	Arg	Gly	Lys	Leu	
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<210> 5083

<211> 1856

<212> DNA

<213> Homo sapiens

<400> 5083

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<210> 5084

<211> 396

<212> PRT

<213> Homo sapiens

<400> 5084

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			20					25					30		
Asp	Ser	Glu	Gly	Gly	Ala	Ala	Gly	Gly	Glu	Ala	Asp	Met	Asp	Phe	Leu
		35					40					45			
Arg	Asn	Leu	Phe	Ser	Gln	Thr	Leu	Ser	Leu	Gly	Ser	Gln	Lys	Glu	Arg
	50				55				60						
Leu	Leu	Asp	Glu	Leu	Thr	Leu	Glu	Gly	Val	Ala	Arg	Tyr	Met	Gln	Ser
65					70				75					80	
Glu	Arg	Cys	Arg	Arg	Val	Ile	Cys	Leu	Val	Gly	Ala	Gly	Ile	Ser	Thr
			85					90						95	
Ser	Ala	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro	Ser	Thr	Gly	Leu	Tyr	Asp
			100					105					110		
Asn	Leu	Glu	Lys	Tyr	His	Leu	Pro	Tyr	Pro	Glu	Ala	Ile	Phe	Glu	Ile
		115					120					125			
Ser	Tyr	Phe	Lys	Lys	His	Pro	Glu	Pro	Phe	Phe	Ala	Leu	Ala	Lys	Glu
		130				135					140				
Leu	Tyr	Pro	Gly	Gln	Phe	Lys	Pro	Thr	Ile	Cys	His	Tyr	Phe	Met	Arg
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Leu	Leu	Lys	Asp	Lys	Gly	Leu	Leu	Leu	Arg	Cys	Tyr	Thr	Gln	Asn	Ile
			165					170						175	
Asp	Thr	Leu	Glu	Arg	Ile	Ala	Gly	Leu	Glu	Gln	Glu	Asp	Leu	Val	Glu
		180						185					190		
Ala	His	Gly	Thr	Phe	Tyr	Thr	Ser	His	Cys	Val	Ser	Ala	Ser	Cys	Arg
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His	Glu	Tyr	Pro	Leu	Ser	Trp	Met	Lys	Glu	Lys	Ile	Phe	Ser	Glu	Val

210	215	220
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Phe Phe Gly Glu Ser Leu	Pro Ala Arg Phe Phe	Ser Cys Met Gln Ser
245	250	255
Asp Phe Leu Lys Val Asp	Leu Leu Leu Val Met	Gly Thr Ser Leu Gln
260	265	270
Val Gln Pro Phe Ala Ser	Leu Ile Ser Lys Ala	Pro Leu Ser Thr Pro
275	280	285
Arg Leu Leu Ile Asn Lys	Glu Lys Ala Gly Gln	Ser Asp Pro Phe Leu
290	295	300
Gly Met Ile Met Gly Leu	Gly Gly Gly Met Asp	Phe Asp Ser Lys Lys
305	310	315
Ala Tyr Arg Asp Val Ala	Trp Leu Gly Glu Cys	Asp Gln Gly Cys Leu
325	330	335
Ala Leu Ala Glu Leu Leu	Gly Trp Lys Lys Glu	Leu Glu Asp Leu Val
340	345	350
Arg Arg Glu His Ala Ser	Ile Asp Ala Gln Ser	Gly Ala Gly Val Pro
355	360	365
Asn Pro Ser Thr Ser Ala	Ser Pro Lys Lys Ser	Pro Pro Pro Ala Lys
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Asp Glu Ala Arg Thr Thr	Glu Arg Glu Lys Pro	Gln
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<210> 5085

<211> 2964

<212> DNA

<213> Homo sapiens

<400> 5085

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<211> 792

<212> PRT

<213> Homo sapiens

<400> 5086

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			20					25					30		
His	Pro	Asp	Val	His	Ile	Met	Gln	His	His	Val	Leu	Pro	Ile	Gln	Ala
			35			40					45				
Arg	Leu	Gly	Ser	Ile	Ala	Glu	Ile	Asp	Leu	Gly	Val	Pro	Pro	Pro	Val
	50					55					60				
Met	Lys	Thr	Phe	Lys	Glu	Phe	Leu	Leu	Ser	Leu	Asp	Asp	Ser	Val	Asp
65				70					75					80	
Glu	Thr	Glu	Ala	Val	Lys	Arg	Tyr	Asn	Asp	Tyr	Lys	Leu	Asp	Phe	Arg
			85					90					95		
Arg	Gln	Gln	Met	Gln	Asp	Phe	Phe	Leu	Ala	His	Lys	Asp	Glu	Glu	Trp
			100					105					110		
Phe	Arg	Ser	Lys	Tyr	His	Pro	Asp	Glu	Val	Gly	Lys	Arg	Arg	Gln	Glu
			115				120						125		
Ala	Arg	Gly	Ala	Leu	Gln	Asn	Arg	Leu	Arg	Val	Phe	Leu	Ser	Leu	Met
			130			135					140				
Glu	Thr	Gly	Trp	Phe	Asp	Asn	Leu	Leu	Leu	Asp	Ile	Asp	Lys	Ala	Asp
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Ala	Ile	Val	Lys	Met	Leu	Asp	Ala	Ala	Val	Ile	Lys	Met	Glu	Gly	Gly
			165					170						175	
Thr	Glu	Asn	Asp	Leu	Arg	Ile	Leu	Glu	Gln	Glu	Glu	Glu	Glu	Glu	Gln
			180				185						190		
Ala	Gly	Lys	Pro	Gly	Glu	Pro	Ser	Lys	Lys	Glu	Glu	Gly	Arg	Ala	Gly

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Ala Gly Leu Gly Asp Gly	Glu Arg Lys Thr Asn Asp	Lys Asp Glu Lys
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Lys Glu Asp Gly Lys Gln	Ala Glu Asn Asp Ser Ser	Asn Asp Asp Lys
225	230	235
Thr Lys Lys Ser Glu Gly	Asp Gly Asp Lys Glu	Glu Lys Lys Glu Asp
245	250	255
Ser Glu Lys Glu Ala Lys	Lys Ser Ser Lys Lys Arg	Asn Arg Lys His
260	265	270
Ser Gly Asp Asp Ser Phe	Asp Glu Gly Ser Val Ser	Glu Ser Glu Ser
275	280	285
Glu Ser Glu Ser Gly Gln	Ala Glu Glu Glu Lys Glu	Glu Ala Glu Glu
290	295	300
Ala Leu Lys Glu Lys Glu	Lys Pro Lys Glu Glu Glu	Trp Glu Lys Pro
305	310	315
Lys Asp Ala Ala Gly Leu	Glu Cys Lys Pro Arg Pro	Leu His Lys Thr
325	330	335
Cys Ser Leu Phe Met Arg	Asn Ile Ala Pro Asn Ile	Ser Arg Ala Glu
340	345	350
Ile Ile Ser Leu Cys Lys	Arg Tyr Pro Gly Phe Met	Arg Val Ala Leu
355	360	365
Ser Glu Pro Gln Pro Glu	Arg Arg Phe Phe Arg Arg	Gly Trp Val Thr
370	375	380
Phe Asp Arg Ser Val Asn	Ile Lys Glu Ile Cys Trp	Asn Leu Gln Asn
385	390	395
Ile Arg Leu Arg Glu Cys	Glu Leu Ser Pro Gly Val	Asn Arg Asp Leu
405	410	415
Thr Arg Arg Val Arg Asn	Ile Asn Gly Ile Thr Gln	His Lys Gln Ile
420	425	430
Val Arg Asn Asp Ile Lys	Leu Ala Ala Lys Leu Ile	His Thr Leu Asp
435	440	445
Asp Arg Thr Gln Leu Trp	Ala Ser Glu Pro Gly Thr	Pro Pro Leu Pro
450	455	460
Thr Ser Leu Pro Ser Gln	Asn Pro Ile Leu Lys Asn	Ile Thr Asp Tyr
465	470	475
Leu Ile Glu Glu Val Ser	Ala Glu Glu Glu Glu Leu	Leu Gly Ser Ser
485	490	495
Gly Gly Ala Pro Pro Glu	Glu Pro Pro Lys Glu Gly	Asn Pro Ala Glu
500	505	510
Ile Asn Val Glu Arg Asp	Glu Lys Leu Ile Lys Val	Leu Asp Lys Leu
515	520	525
Leu Leu Tyr Leu Arg Ile	Val His Ser Leu Asp Tyr	Tyr Asn Thr Cys
530	535	540
Glu Tyr Pro Asn Glu Asp	Glu Met Pro Asn Arg Cys	Gly Ile Ile His
545	550	555
Val Arg Gly Pro Met Pro	Pro Asn Arg Ile Ser His	Gly Glu Val Leu
565	570	575
Glu Trp Gln Lys Thr Phe	Glu Glu Lys Leu Thr Pro	Leu Leu Ser Val
580	585	590
Arg Glu Ser Leu Ser Glu	Glu Glu Ala Gln Lys Met	Gly Arg Lys Asp
595	600	605
Pro Glu Gln Glu Val Glu	Lys Phe Val Thr Ser Asn	Thr Gln Glu Leu
610	615	620
Gly Lys Asp Lys Trp Leu	Cys Pro Leu Ser Gly Lys	Lys Phe Lys Gly

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<213> Homo sapiens

<400> 5087

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<211> 465

<212> PRT

<213> Homo sapiens

<400> 5088

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Gln	Gly	Arg	Ser	Cys	Pro	Gly	Thr	Pro	Asp	Ile	Ala	Asp	Val	Ala	Glu
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<211> 793

<212> DNA

<213> Homo sapiens

<400> 5089

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Leu	Glu	Asp	Glu	Leu	Arg	Met	Glu	Pro	Leu	Gly	Leu	Glu	Gly	Leu	Asn
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Met	Leu	Ser	Asp	Pro	Cys	Ala	Leu	Leu	Pro	Asp	Pro	Ala	Val	Glu	Glu
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<213> Homo sapiens

<400> 5092

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Arg Asp Pro Ile Ser Leu Asp Cys Gly His Asp Phe Cys Ile Arg Cys
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Phe Ser Thr His Arg Leu Pro Gly Cys Glu Pro Pro Cys Cys Pro Glu
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Lys	Asn	Leu	Ser	Gly	Trp	Met	Gly	Arg	Thr	Gly	Pro	Gly	Phe	Thr	Ser
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Pro	Asp	Glu	Met	Ala	Ala	Gln	Leu	His	Asp	Leu	Arg	Lys	Val	Glu	Ala
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Lys	Arg	Ile	Phe	Ser	Ala	Leu	Arg	Val	Leu	Pro	Asp	Thr	Met	Arg	Asn
			485					490					495		
Leu	Leu	Ser	Thr	Gln	Lys	Asp	Ala	Ile	Leu	Ala	Arg	His	Gly	Val	Ala
		500						505					510		
Leu	Leu	Cys	Lys	Gly	Arg	Asp	Gln	Thr	Leu	Glu	Ala	Leu	Glu	Ala	Glu
		515				520						525			
Leu	Gln	Ala	Thr	Ala	Lys	Ala	Phe	Met	Asp	Ser	Tyr	Thr	Met	Arg	Phe
	530					535					540				
Cys	Gly	His	Leu	Ala	Ala	Val	Gly	Gly	Ala	Val	Gly	Ala	Gly	Leu	Met
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Gly	Leu	Ala	Gly	Gly	Val	Val	Gly	Ala	Gly	Met	Ala	Ala	Ala	Ala	Leu
			565					570					575		
Ala	Ala	Glu	Ala	Gly	Met	Val	Ala	Ala	Gly	Ala	Ala	Val	Gly	Ala	Thr
		580						585					590		
Gly	Ala	Ala	Val	Val	Gly	Gly	Gly	Val	Gly	Ala	Gly	Leu	Ala	Ala	Thr
		595				600						605			
Val	Gly	Cys	Met	Glu	Lys	Glu	Glu	Asp	Glu	Arg	Leu	Leu	Glu	Gly	Asp
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<210> 5093

<211> 1662

<212> DNA

<213> Homo sapiens

<400> 5093

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360

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480

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<210> 5094

<211> 365

<212> PRT

<213> Homo sapiens

<400> 5094

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			20					25					30		
Asp	Val	Val	Lys	Val	Arg	Leu	Gln	Ser	Gln	Arg	Pro	Ser	Met	Ala	Ser
			35				40					45			
Glu	Leu	Met	Pro	Ser	Ser	Arg	Leu	Trp	Ser	Leu	Ser	Tyr	Thr	Lys	Leu

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Pro Ser Leu Ser Tyr Thr Lys Trp Lys Cys Leu Leu Tyr Cys Asn Gly		
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Val Leu Glu Pro Leu Tyr Leu Cys Pro Asn Gly Ala Arg Cys Ala Thr		80
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Trp Phe Gln Asp Pro Thr Arg Phe Thr Gly Thr Met Asp Ala Phe Val		95
	100	105
Lys Ile Val Arg His Glu Gly Thr Arg Thr Leu Trp Ser Gly Leu Pro		110
	115	120
Ala Thr Leu Val Met Thr Val Pro Ala Thr Ala Ile Tyr Phe Thr Ala		125
	130	135
Tyr Asp Gln Leu Lys Ala Phe Leu Cys Gly Arg Ala Leu Thr Ser Asp		140
145	150	155
Leu Tyr Ala Pro Met Val Ala Gly Ala Leu Ala Arg Leu Gly Thr Val		160
	165	170
Thr Val Ile Ser Pro Leu Glu Leu Met Arg Thr Lys Leu Gln Ala Gln		175
	180	185
His Val Ser Tyr Arg Glu Leu Gly Ala Cys Val Arg Thr Ala Val Ala		190
	195	200
Gln Gly Gly Trp Arg Ser Leu Trp Leu Gly Trp Gly Pro Thr Ala Leu		205
	210	215
Arg Asp Val Pro Phe Ser Val His Pro Pro Pro Gln Ala Leu Tyr Trp		220
225	230	235
Phe Asn Tyr Glu Leu Val Lys Ser Trp Leu Asn Gly Leu Arg Pro Lys		240
	245	250
Asp Gln Thr Ser Val Gly Met Ser Phe Val Ala Gly Gly Ile Ser Gly		255
	260	265
Thr Val Ala Val Leu Thr Leu Pro Phe Asp Val Val Lys Thr Gln		270
	275	280
Arg Gln Val Ala Leu Gly Ala Met Glu Ala Val Arg Val Asn Pro Leu		285
	290	295
His Val Asp Ser Thr Trp Leu Leu Leu Arg Arg Ile Arg Ala Glu Ser		300
305	310	315
Gly Thr Lys Gly Leu Phe Ala Gly Phe Leu Pro Arg Ile Ile Lys Ala		320
	325	330
Ala Pro Ser Cys Ala Ile Met Ile Ser Thr Tyr Glu Phe Gly Lys Ser		335
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<210> 5095

<211> 2230

<212> DNA

<213> Homo sapiens

<400> 5095

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120

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180

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240

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<210> 5096

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5096

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Pro	Glu	Glu	Glu	Glu	Ala	Gly	Cys	Leu	Phe	Gly	Gly	Ser	Phe	Ser	Leu
			20					25					30		
Gly	Ile	Pro	Glu	Ala	Val	Glu	Gln	His	Leu	Tyr	Glu	Met	Leu	Pro	Glu
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Gln	Gln	His	Phe	Pro	Val	Gly	Thr	Ala	Pro	Gly	Asn	Pro	Val	Pro	Ser
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Glu	Gln	Gly	Gly	Arg	Thr	His	Pro	Ser	Leu	Ile	Arg	Ile	Trp	Ala	Arg
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Arg	Ala	Gln	Gln	Gly	Arg	Leu	Leu	Arg	Leu	Pro	Thr	Ser	Gln	His	Arg
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Leu	Ser	Gly	Leu	Asn	Pro	Ser	Val	Leu	Phe	Pro	Ser	Trp	Leu	Ile	Gly
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<210> 5097

<211> 3074

<212> DNA

<213> Homo sapiens

<400> 5097

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<210> 5098

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5098

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Gly Val Phe Ala Ile Met Leu Pro Thr Lys Ser Lys Glu Cys Trp Phe

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<210> 5100
<211> 102
<212> PRT
<213> Homo sapiens
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<400> 5100

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 35 40 45
 Leu Gly Thr Leu Ser Cys Val Lys Glu Asn Lys Gly Lys Glu Thr Ser
 50 55 60
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<210> 5101

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 5101

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<210> 5102

<211> 436

<212> PRT

<213> Homo sapiens

<400> 5102

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 35 40 45
 Gln Pro Arg Ala Leu Glu Lys His Ala Asp Ser Ile Leu Ala Leu Ala
 50 55 60
 Ser Val Phe Trp Ser Ile Ser Tyr Tyr Ser Ser Pro Phe Ala Phe Phe
 65 70 75 80
 Tyr Leu Tyr Arg Lys Gly Tyr Leu Ser Leu Ser Lys Val Val Pro Phe
 85 90 95
 Ser His Tyr Ala Gly Thr Leu Leu Leu Leu Leu Ala Gly Val Ala Cys
 100 105 110
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 Thr Ile Leu Glu Ala Thr His Arg Asn Gln Ser Ser Glu Asn Lys Arg
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 Gln Leu Ala Asn Tyr Asn Phe Asp Phe Arg Ser Trp Pro Val Asp Phe
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 His Trp Glu Glu Pro Ser Ser Arg Lys Glu Ser Arg Gly Gly Pro Ser

165 170 175
 Arg Arg Gly Val Ala Leu Leu Arg Pro Glu Pro Leu His Arg Gly Thr
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 Ala Asp Thr Leu Leu Asn Arg Val Lys Lys Leu Pro Cys Gln Ile Thr
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 Ser Tyr Leu Val Ala His Thr Leu Gly Arg Arg Met Leu Tyr Pro Gly
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 Ser Val Tyr Leu Leu Gln Lys Ala Leu Met Pro Ala Leu Leu Gln Gly
 225 230 235 240
 Gln Ala Arg Leu Val Glu Glu Cys Asn Gly Arg Arg Ala Lys Leu Leu
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 Ala Cys Asp Gly Asn Glu Ile Asp Thr Met Phe Val Asp Arg Arg Gly
 260 265 270
 Thr Ala Glu Pro Gln Gly Gln Lys Leu Val Ile Cys Cys Glu Gly Asn
 275 280 285
 Ala Gly Phe Tyr Glu Val Gly Cys Val Ser Thr Pro Leu Glu Ala Gly
 290 295 300
 Tyr Ser Val Leu Gly Trp Asn His Pro Gly Phe Ala Gly Ser Thr Gly
 305 310 315 320
 Val Pro Phe Pro Gln Asn Glu Ala Asn Ala Met Asp Val Val Val Gln
 325 330 335
 Phe Ala Ile His Arg Leu Gly Phe Gln Pro Gln Asp Ile Val Ile Tyr
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 Ala Trp Ser Ile Gly Gly Phe Thr Ala Thr Trp Ala Ala Met Ser Tyr
 355 360 365
 Pro Asp Val Ser Ala Met Ile Leu Asp Ala Ser Phe Asp Asp Leu Val
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 Pro Leu Ala Leu Lys Val Met Pro Asp Ser Trp Arg Gly Leu Val Thr
 385 390 395 400
 Arg Thr Val Arg Gln His Leu Asn Leu Asn Ala Glu Gln Leu Cys
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<211> 1982

<212> DNA

<213> Homo sapiens

<400> 5103

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 180

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1982

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<212> PRT
<213> Homo sapiens

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35 40 45
Pro Ala Ala Ser Leu Lys Thr Thr Lys Asp Leu Met Ser Lys Ser Leu
50 55 60
Ser Gly Val Cys Pro Ala Ser Ser Gly Leu Leu Arg Thr Pro His Pro
65 70 75 80
Glu Gly Ala Arg Arg Pro Ala Gly Leu Ala Gly Pro Gly Ser Ser Leu
85 90 95
Thr Ala Gly Trp Thr Ala Phe Arg Thr Cys Pro Gly Cys Ser Ala Phe
100 105 110
Val Ala Gly Ser Asn Trp Arg Asn Leu Glu Arg Gly Ser Cys Ala Cys
115 120 125
Lys Asp Gly Phe Cys Val Ser Ser Gly Phe Leu Leu Ser Gly Pro Gly
130 135 140
Ser Ser Leu Val Pro Tyr Arg Pro Leu Phe Val His Gly Leu Ala Leu
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Tyr Glu Arg Ala Met Cys Phe
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<210> 5105
<211> 1359
<212> DNA
<213> Homo sapiens

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<210> 5106

<211> 178

<212> PRT

<213> Homo sapiens

<400> 5106

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		20						25					30		
Gly	Asp	Val	Ile	Cys	Tyr	Tyr	Gly	Asn	Arg	Gly	Glu	Pro	Asp	Pro	Ile
		35					40					45			
Val	Leu	Thr	Pro	Gly	Thr	Tyr	Gly	Leu	Ser	Asn	Ala	Leu	Leu	Glu	Thr
	50				55					60					
Pro	Trp	Arg	Lys	Leu	Cys	Phe	Gly	Lys	Gln	Leu	Phe	Leu	Glu	Ala	Val
65				70					75					80	
Glu	Arg	Ser	Gln	Ala	Leu	Pro	Lys	Asp	Val	Leu	Ile	Ala	Ser	Leu	Leu
			85					90					95		
Asp	Val	Leu	Asn	Asn	Glu	Glu	Ala	Gln	Leu	Pro	Asp	Pro	Ala	Ile	Glu
		100					105					110			
Asp	Gln	Gly	Gly	Glu	Tyr	Val	Gln	Pro	Met	Leu	Ser	Lys	Tyr	Ala	Ala
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<212> DNA
<213> Homo sapiens
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1207

<210> 5108

<211> 83

<212> PRT

<213> Homo sapiens

<400> 5108

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Phe	Ile	Tyr	Leu	Phe	Arg	Asp	Arg	Val	Ser	Leu	Cys	Arg	Xaa	Arg	Gly
			20				25					30			
Val	Gln	Trp	Arg	Asn	Leu	Ser	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly	Phe
		35				40					45				
Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	Asp	Tyr	Arg	Arg
	50				55					60					
Val	Pro	Pro	Cys	Pro	Ala	Asn	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Arg	Val
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Ser	Pro	Cys													

<210> 5109

<211> 651

<212> DNA

<213> Homo sapiens

<400> 5109

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<210> 5110

<211> 206

<212> PRT

<213> Homo sapiens

<400> 5110

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 Gln Glu Ala Ser Asp Asn Cys Phe Met Asp Ser Asp Ile Lys Val Leu
 35 40 45
 Glu Asp Gln Phe Asp Glu Ile Ile Val Asp Ile Ala Thr Lys Arg Lys
 50 55 60
 Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala
 65 70 75 80
 Lys Gln Glu Ile Leu Lys Gln Tyr His Pro Val Val His Pro Leu Asp
 85 90 95
 Leu Lys Tyr Asp Pro Asp Pro Val Leu Asn Gly Asn Ala Phe Asn Phe
 100 105 110
 Ser Pro Phe Asn Met Met Leu Ala Val Asp Leu Ser Tyr Met Val Phe
 115 120 125
 Ile Thr Ser Ala Pro His Met Glu Asn Leu Lys Cys Arg Gly Glu Thr
 130 135 140
 Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu Pro Ala Leu Ile
 145 150 155 160
 Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met Gln Pro Val Ile
 165 170 175
 His Leu Gln Arg Ile His Gln Glu Val Phe Ser Ser Cys His Arg Lys
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<210> 5111

<211> 2247

<212> DNA

<213> Homo sapiens

<400> 5111

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2160

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<210> 5112

<211> 581

<212> PRT

<213> Homo sapiens

<400> 5112

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			20					25					30		
Leu	Pro	Trp	Phe	Ala	Val	Val	Leu	Gly	Tyr	Arg	Glu	Arg	Pro	Arg	Val
		35					40				45				
Ser	Gly	Arg	Pro	Ser	Leu	Gly	Ala	Pro	Gln	Arg	Leu	Arg	Ala	Tyr	Gly
	50				55					60					
Gly	Arg	Lys	Gly	Leu	Glu	Ala	Ala	Pro	Trp	Val	Thr	Thr	Ala	Arg	Pro
65				70					75					80	
Thr	Phe	Pro	His	Val	Ala	Ala	Lys	Thr	Gly	Ser	Gly	Ala	Ser	Ile	Gly
			85					90						95	
Cys	Thr	Pro	Thr	Ser	Thr	Gln	Ala	Lys	Met	Val	Ser	Lys	Arg	Ile	Ala
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Gln	Glu	Thr	Phe	Asp	Ala	Ala	Val	Arg	Glu	Asn	Ile	Glu	Glu	Phe	Ala
		115					120					125			
Met	Gly	Pro	Glu	Glu	Ala	Val	Lys	Glu	Ala	Val	Glu	Gln	Phe	Glu	Ser
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Gln	Gly	Val	Asp	Leu	Ser	Asn	Ile	Val	Lys	Thr	Ala	Pro	Lys	Val	Ser
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Ala	Asp	Gly	Ser	Gln	Glu	Pro	Thr	His	Asp	Ile	Leu	Gln	Met	Leu	Ser
			165					170						175	
Asp	Leu	Gln	Glu	Ser	Val	Ala	Ser	Ser	Arg	Pro	Gln	Glu	Val	Ser	Ala
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Tyr	Leu	Thr	Arg	Phe	Cys	Asp	Gln	Cys	Lys	Gln	Asp	Lys	Ala	Cys	Arg
		195					200					205			
Phe	Leu	Ala	Ala	Gln	Lys	Gly	Ala	Tyr	Pro	Ile	Ile	Phe	Thr	Ala	Arg
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Lys	Leu	Ala	Thr	Ala	Gly	Asp	Gln	Gly	Leu	Leu	Leu	Gln	Ser	Leu	Asn
225				230					235					240	
Ala	Leu	Ser	Val	Leu	Thr	Asp	Gly	Gln	Pro	Asp	Leu	Leu	Asp	Ala	Gln
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		260						265					270		
Asp	Leu	Thr	Cys	Ser	Gly	Ile	Arg	Cys	Val	Arg	His	Ala	Cys	Leu	Lys
		275					280					285			
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	290					295					300				
Leu	Thr	Gly	Ala	Ile	Thr	His	His	Gly	His	His	Thr	Asp	Val	Val	Arg
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Glu	Ala	Cys	Trp	Ala	Leu	Arg	Val	Met	Thr	Phe	Asp	Asp	Asp	Ile	Arg
			325					330						335	
Val	Pro	Phe	Gly	His	Ala	His	Asn	His	Ala	Lys	Met	Ile	Val	Gln	Glu

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 370 375 380
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 385 390 395 400
 Ile Leu Val Ser Leu Leu Ala Asp Cys Asn Asp His Gln Met Arg Asp
 405 410 415
 Gln Ser Gly Val Gln Glu Leu Val Lys Gln Val Leu Ser Thr Leu Arg
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 Ala Ile Ala Gly Asn Asp Asp Val Lys Asp Ala Ile Val Arg Ala Gly
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 Gly Thr Glu Ser Ile Val Ala Ala Met Thr Gln His Leu Thr Ser Pro
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 465 470 475 480
 Lys Pro Asp Asn Ser Arg Ile Ile Val Glu Gly Gly Ala Val Ala
 485 490 495
 Ala Leu Gln Ala Met Lys Ala His Pro Gln Lys Ala Gly Val Gln Lys
 500 505 510
 Gln Ala Cys Met Leu Ile Arg Asn Leu Val Ala His Gly Gln Ala Phe
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 Ser Lys Pro Ile Leu Asp Leu Gly Ala Glu Ala Leu Ile Met Gln Ala
 530 535 540
 Arg Ser Ala His Arg Asp Cys Glu Asp Val Ala Lys Ala Ala Leu Arg
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 Asp Leu Gly Cys His Val Glu Leu Arg Glu Leu Trp Thr Gly Gln Arg
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 Gly Asn Leu Ala Pro
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<210> 5113

<211> 472

<212> DNA

<213> Homo sapiens

<400> 5113

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120

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180

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240

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300

tttccttgac atgatgaagt tgagcaaggt ggctatagaa ctttttttct taattttatt

360

gcccagtaa tgttctttac aaagtaggga aatacagata cataaaaaga agactgcca

420

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472

<210> 5114
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5114
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 Ser Pro Gly Thr Leu Thr Arg Cys Leu Phe Cys Ser Pro Leu Asn Ser
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 Met His Leu Thr Pro Val Ile Gly Thr Gln Arg Gly Ala Trp His Leu
 35 40 45
 Gln Cys Arg His Thr Gly His Arg Ser Val Gln Glu Gly Pro Phe Ala
 50 55 60
 Asn Val His Ser Ser Leu Cys Leu Phe Ser Tyr Ala Phe Leu Asp Trp
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 Ser Lys Arg Phe Phe Phe Pro Ser Lys Glu Gln Phe Met Phe Leu Asn
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 Thr Phe Phe Pro
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<210> 5115
 <211> 1003
 <212> DNA
 <213> Homo sapiens

<400> 5115
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 180
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 300
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 420
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 480
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 780

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 840
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 900
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<210> 5116

<211> 226

<212> PRT

<213> Homo sapiens

<400> 5116

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Arg	Gly	Ser	Gln	Val	Thr	Ala	Gly	Glu	Ala	Asp	Gly	Arg	Ala	Pro	Gly
			20					25					30		
Ser	Pro	Gly	Pro	Gln	Ala	Leu	Lys	Gly	Gly	Ala	Arg	Gly	Ser	Gly	His
		35					40					45			
Val	Leu	Thr	Ser	Ser	Ser	Gly	Ser	Ala	Cys	Ala	Gly	Ser	Pro	Leu	Cys
	50					55					60				
Pro	Ala	Met	Ser	His	Leu	Gly	Val	Ser	His	Val	Arg	Glu	Gln	Leu	Leu
65					70					75				80	
Leu	Ser	Ile	Met	Gln	Phe	Leu	Ser	Trp	Val	Ile	Ala	Val	His	Gly	Glu
				85					90					95	
Gln	Val	His	Ala	Gln	Pro	Val	His	Pro	Leu	Phe	Leu	Leu	Tyr	Ile	His
		100						105					110		
Tyr	His	Ser	His	His	His	Pro	Asp	Gln	Gly	Asp	Glu	Glu	Gly	Pro	
		115					120					125			
Gln	His	Ile	Ala	His	His	Gly	Val	Ala	Val	Gly	Leu	Gly	Gly	Ile	Gly
	130					135					140				
His	Ser	Gly	Val	Thr	His	Asp	Ile	Ser	Ser	Arg	Arg	Ala	Gly	Trp	Ser
145					150					155				160	
Ala	Trp	Ala	Val	Ala	Leu	Arg	Glu	Gly	Ala	Ser	Thr	Gly	Leu	Pro	Ser
				165					170					175	
Arg	Met	Leu	Ile	Val	Pro	Gly	Gln	Gly	Gly	Met	Pro	Gly	Trp	Gly	Gly
		180					185					190			
Arg	Gln	Ala	Ala	Ala	Arg	Met	Arg	Ala	Ser	Asn	Ser	Gly	Xaa	Gly	Gly
	195						200					205			
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Gly	Cys														
225															

<210> 5117

<211> 1180

<212> DNA

<213> Homo sapiens

<400> 5117

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 120
 agtgggaaaa gtgcaacagc gaacaccatc cttggagagg aaatctttga ttctagaatt
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 240
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 1020
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<210> 5118

<211> 300

<212> PRT

<213> Homo sapiens

<400> 5118

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 Ile Phe Asp Ser Arg Ile Ala Ala Gln Ala Val Thr Lys Asn Cys Gln
 35 40 45
 Lys Ala Ser Arg Glu Trp Gln Gly Arg Asp Leu Leu Val Val Asp Thr
 50 55 60
 Pro Gly Leu Phe Asp Thr Lys Glu Ser Leu Asp Thr Thr Cys Lys Glu

65					70					75				80	
Ile	Ser	Arg	Cys	Ile	Ile	Ser	Ser	Cys	Pro	Gly	Pro	His	Ala	Ile	Val
				85					90					95	
Leu	Val	Leu	Leu	Leu	Gly	Arg	Tyr	Thr	Glu	Glu	Glu	Gln	Lys	Thr	Val
			100					105					110		
Ala	Leu	Ile	Lys	Ala	Val	Phe	Gly	Lys	Ser	Ala	Met	Lys	His	Met	Val
		115					120					125			
Ile	Leu	Phe	Thr	Arg	Lys	Glu	Glu	Leu	Glu	Gly	Gln	Ser	Phe	His	Asp
	130					135					140				
Phe	Ile	Ala	Asp	Ala	Asp	Val	Gly	Leu	Lys	Ser	Ile	Val	Lys	Glu	Cys
145				150					155					160	
Gly	Asn	Arg	Cys	Cys	Ala	Phe	Ser	Asn	Ser	Lys	Lys	Thr	Ser	Lys	Ala
			165					170					175		
Glu	Lys	Glu	Ser	Gln	Val	Gln	Glu	Leu	Val	Glu	Leu	Ile	Glu	Lys	Met
		180				185						190			
Val	Gln	Cys	Asn	Glu	Gly	Ala	Tyr	Phe	Ser	Asp	Asp	Ile	Tyr	Lys	Asp
	195					200					205				
Thr	Glu	Glu	Arg	Leu	Lys	Gln	Arg	Glu	Glu	Val	Leu	Arg	Lys	Ile	Tyr
	210					215					220				
Thr	Asp	Gln	Leu	Asn	Glu	Glu	Ile	Lys	Leu	Val	Glu	Glu	Asp	Lys	His
225				230					235					240	
Lys	Ser	Glu	Glu	Glu	Lys	Glu	Lys	Glu	Ile	Lys	Leu	Leu	Lys	Leu	Lys
			245					250					255		
Tyr	Asp	Glu	Lys	Ile	Lys	Asn	Ile	Arg	Glu	Glu	Ala	Glu	Arg	Asn	Ile
		260					265				270				
Phe	Lys	Asp	Val	Phe	Asn	Arg	Ile	Trp	Lys	Met	Leu	Ser	Glu	Ile	Trp
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His	Arg	Phe	Leu	Ser	Lys	Cys	Lys	Phe	Tyr	Ser	Ser				
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<210> 5119

<211> 1450

<212> DNA

<213> Homo sapiens

<400> 5119

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120

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180

agagaggcat ttgccccagt agctatgatt ataatttgca atgacagcca cagtgtttc

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300

attttttatt ttttgactct tgcaggaaat atggatcatag ttcttggtgc cttgaaggat

360

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420

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540

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<210> 5120

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5120

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		20						25					30		
Ile	Phe	Tyr	Phe	Leu	Thr	Leu	Ala	Gly	Asn	Met	Val	Ile	Val	Leu	Val
		35					40				45				
Ser	Leu	Lys	Asp	Pro	Lys	Leu	His	Ile	Pro	Met	Tyr	Phe	Phe	Leu	Ser
	50					55					60				
Asn	Leu	Ser	Leu	Val	Asp	Leu	Cys	Leu	Thr	Ser	Ser	Cys	Val	Pro	Gln
65				70					75					80	
Met	Leu	Ile	Asn	Phe	Trp	Gly	Pro	Glu	Lys	Thr	Ile	Ser	Tyr	Ile	Gly
			85						90					95	
Cys	Ala	Ile	Gln	Leu	Tyr	Val	Phe	Leu	Trp	Leu	Gly	Ala	Thr	Glu	Tyr
		100						105					110		
Val	Leu	Leu	Val	Val	Met	Ala	Val	Asp	Cys	Tyr	Val	Ala	Val	Cys	His

115	120	125
Pro Leu Gln Asn Thr Met Ile Met His Pro Lys Leu Cys Leu Gln Leu		
130	135	140
Ala Ile Leu Ala Trp Gly Thr Gly Leu Ala Gln Ser Leu Ile Gln Ser		
145	150	155
Pro Ala Thr Leu Arg Leu Pro Phe Cys Ser Gln Arg Met Val Asp Asp		160
165	170	175
Val Val Cys Glu Val Pro Ala Leu Ile Gln Leu Ser Ser Thr Asp Thr		
180	185	190
Thr Tyr Ser Glu Ile Gln Met Ser Ile Ala Ser Val Val Leu Val		
195	200	205
Met Pro Leu Ile Ile Ile Leu Ser Ser Ser Gly Ala Ile Ala Lys Ala		
210	215	220
Val Leu Arg Ile Lys Ser Thr Ala Gly Gln Lys Lys Ala Phe Gly Thr		
225	230	235
Cys Ile Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Thr Val Thr		
245	250	255
Gly Val Tyr Leu Gln Pro Lys Asn His Tyr Pro His Glu Trp Gly Lys		
260	265	270
Phe Leu Thr Leu Phe Tyr Thr Val Val Thr Pro Thr Leu Asn Pro Leu		
275	280	285
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Ile Arg Leu		
290	295	300
Gly Arg Arg Thr Trp Asp Ser Gln Asn Asn		
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<210> 5121

<211> 944

<212> DNA

<213> Homo sapiens

<400> 5121

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420
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660

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<210> 5122

<211> 172

<212> PRT

<213> Homo sapiens

<400> 5122

Met	Pro	Gly	Ile	Val	Glu	Leu	Pro	Thr	Leu	Glu	Glu	Leu	Lys	Val	Asp
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Glu	Val	Lys	Ile	Ser	Ser	Ala	Val	Leu	Lys	Ala	Ala	Ala	His	His	Tyr
			20					25					30		
Gly	Ala	Gln	Cys	Asp	Lys	Pro	Asn	Lys	Glu	Phe	Met	Leu	Cys	Arg	Trp
		35					40					45			
Glu	Glu	Lys	Asp	Pro	Arg	Arg	Cys	Leu	Glu	Glu	Gly	Lys	Leu	Val	Asn
		50				55					60				
Lys	Cys	Ala	Leu	Asp	Phe	Phe	Arg	Gln	Ile	Lys	Arg	His	Cys	Ala	Glu
65				70					75					80	
Pro	Phe	Thr	Glu	Tyr	Trp	Thr	Cys	Ile	Asp	Tyr	Thr	Gly	Gln	Gln	Leu
			85					90					95		
Phe	Arg	His	Cys	Arg	Lys	Gln	Gln	Ala	Lys	Phe	Asp	Glu	Cys	Val	Leu
			100					105					110		
Asp	Lys	Leu	Gly	Trp	Val	Arg	Pro	Asp	Leu	Gly	Glu	Leu	Ser	Lys	Val
		115					120					125			
Thr	Lys	Val	Lys	Thr	Asp	Arg	Pro	Leu	Pro	Glu	Asn	Pro	Tyr	His	Ser
		130				135					140				
Arg	Pro	Arg	Pro	Asp	Pro	Ser	Pro	Glu	Ile	Glu	Gly	Asp	Leu	Gln	Pro
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<210> 5123

<211> 1139

<212> DNA

<213> Homo sapiens

<400> 5123

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 180
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<210> 5124

<211> 101

<212> PRT

<213> Homo sapiens

<400> 5124

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Thr	Pro	Lys	Pro	His	Leu	Ala	Ala	His	Ser	Cys	Ser	Leu	Leu	Gln	Lys
			20					25					30		
Gln	Ala	Cys	Met	Leu	Ile	Arg	Asn	Leu	Val	Ala	His	Gly	Gln	Ala	Phe
		35					40					45			
Ser	Lys	Pro	Ile	Leu	Asp	Leu	Gly	Ala	Glu	Ala	Leu	Ile	Met	Gln	Ala
		50				55					60				
Arg	Ser	Ala	His	Arg	Asp	Cys	Glu	Asp	Val	Ala	Lys	Ala	Ala	Leu	Arg
		65			70				75					80	
Asp	Leu	Gly	Cys	His	Val	Glu	Leu	Arg	Glu	Leu	Trp	Thr	Gly	Gln	Arg
			85					90						95	
Gly	Asn	Leu	Ala	Pro											
			100												

<210> 5125

<211> 6244

<212> DNA

<213> Homo sapiens

<400> 5125

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<211> 117

<212> PRT

<213> Homo sapiens

<400> 5126

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Thr Phe Ser Gly Leu Val Ser Thr Phe Glu Val Val Leu Trp Leu Asn
      20             25             30
Phe Ser Cys Ser Phe Cys Val Val Phe Arg Gly Gly Ser Pro His Ala
      35             40             45
Glu Ile Leu Cys Met Gln Pro Thr Gly Lys Arg Pro Pro Gly Ser Gln
      50             55             60
Asp Phe Ser Phe Ser Cys Leu Cys Pro Ala Thr Cys Ser Leu Pro Leu
      65             70             75             80
Phe Arg Cys Gln Arg Gly Asp Phe Arg Ala Val Cys Phe Asn Pro Gly
      85             90             95
Arg Ser Asp Thr Leu Val Ser Phe Phe Gln Glu Thr Ile Ala Phe Thr
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Asp Val Leu Val Val
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<210> 5127

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5127

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120
atgtcagccg gctctgcagc ccttcctca tcgactacga ttctgtaggc aagttcgaga
180
gcatggagga cgatgccaac ttcttctga gctcatccg cgcgcgcggg aacctgacct
240
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300
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<210> 5128

<211> 55

<212> PRT

<213> Homo sapiens

<400> 5128

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Gly Thr Ala Pro Met Pro Leu Gly Arg Pro Cys Gly Pro Ala Leu Gly
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Cys Val Phe Pro Ser Ser Ser Ser Thr Cys Trp Thr Cys Thr Gly Pro
      20             25             30
Trp Gly Trp Thr Phe Thr Gly Thr Met Ser Ala Gly Ser Ala Ala Pro

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35 40 45
Ala Ser Ser Thr Thr Ile Ser
50 55

<210> 5129

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5129

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120
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180
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240
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300
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360
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600
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720
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745

<210> 5130

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5130

Met	Ala	Val	Ser	Arg	Gln	Arg	Leu	Ser	Pro	Ser	Asn	Gly	Ile	Phe	Ser
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Trp	Ala	Leu	Ala	Gly	Ala	Arg	Gln	Leu	Phe	Leu	Ala	Pro	Gln	Gln	Ile
		20					25				30				
Ser	Arg	Gln	Leu	His	Phe	Arg	Leu	Leu	Glu	Glu	Arg	Gln	Gly	Val	Gly
		35					40				45				
Gly	Val	Gly	Leu	Ser	Ala	Lys	Gly	Gly	Lys	His	Pro	Gln	Asp	Arg	Asn
	50					55					60				
Leu	Ala	Ala	Val	Gly	Pro	Glu	Val	Gln	Ala	Cys	Gly	Trp	Ala	Arg	Pro
65					70				75					80	
Asp	Pro	Ala	Cys	Ala	Gly	Gly	Gln	Val	Ala	Gly	Gly	Gly	Glu	Pro	Gly

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 Val Val Gln Ala Ala Trp Met Ser Arg Gln Leu Gly Leu Cys Pro
 100 105 110

<210> 5131

<211> 789

<212> DNA

<213> Homo sapiens

<400> 5131

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120

taccagggcc gtgagctcta tgagcggcca ccccatctct atgctgtggc caacgccgcc

180

tacaaggcaa tgaagcacccg gtccaggac acctgcacg tcatctcagg ggagagtggg

240

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300

agccagaggg ctgaggtgga gagggtaag gacgtgctgc tcaagtccac ctgtgtgctg

360

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420

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660

gacagtgatg agcagagcca ccaggcagtg accgaggcca tgagggtcat cggcttcagt

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780

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789

<210> 5132

<211> 263

<212> PRT

<213> Homo sapiens

<400> 5132

Met Arg Asn Leu Gln Leu Arg Phe Glu Lys Gly Arg Ile Tyr Thr Tyr

1

5

10

15

Ile Gly Glu Val Leu Val Ser Val Asn Pro Tyr Gln Glu Leu Pro Leu

20

25

30

Tyr Gly Pro Glu Ala Ile Ala Gln Tyr Gln Gly Arg Glu Leu Tyr Glu

35

40

45

Arg Pro Pro His Leu Tyr Ala Val Ala Asn Ala Ala Tyr Lys Ala Met

50

55

60

Lys His Arg Ser Arg Asp Thr Cys Ile Val Ile Ser Gly Glu Ser Gly

<210> 5134

<211> 157

<212> PRT

<213> Homo sapiens

<400> 5134

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Met Asn Arg Phe Asp Arg Pro Asp Arg Asn Val Arg Gln Pro Gln Glu
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Gly Phe Trp Lys Arg Pro Pro Gln Arg Trp Ser Gly Gln Glu His Tyr
 20          25          30
His Leu Ser His Pro Asp His Tyr His His His Gly Lys Ser Asp Leu
 35          40          45
Ser Arg Gly Ser Pro Tyr Arg Glu Ser Pro Leu Gly His Phe Glu Ser
 50          55          60
Tyr Gly Gly Met Pro Phe Phe Gln Ala Gln Lys Met Phe Val Asp Val
 65          70          75          80
Pro Glu Asn Thr Val Ile Leu Asp Glu Met Thr Leu Arg His Met Val
 85          90          95
Gln Asp Cys Thr Ala Val Lys Thr Gln Leu Leu Lys Leu Lys Arg Leu
100          105          110
Leu His Gln His Asp Gly Ser Gly Ser Leu His Asp Ile Gln Leu Ser
115          120          125
Leu Pro Ser Ser Pro Glu Pro Glu Asp Gly Asp Lys Val Tyr Lys Asn
130          135          140
Glu Asp Leu Leu Asn Glu Ile Lys Gln Leu Lys Asp Glu
145          150          155

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<210> 5135

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 5135

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660

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<210> 5136

<211> 341

<212> PRT

<213> Homo sapiens

<400> 5136

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Pro	Ser	Arg	Arg	Lys	Ala	Ala	Gln	Leu	Pro	Trp	Glu	Asp	Gly	Arg	Ser
		20					25					30			
Gly	Leu	Leu	Ser	Gly	Gly	Leu	Pro	Arg	Lys	Cys	Ser	Val	Phe	His	Leu
		35				40						45			
Phe	Val	Ala	Cys	Leu	Ser	Leu	Gly	Phe	Phe	Ser	Leu	Leu	Trp	Leu	Gln
	50				55					60					
Leu	Ser	Cys	Ser	Gly	Asp	Val	Ala	Arg	Ala	Val	Arg	Gly	Gln	Gly	Gln
65				70				75					80		
Glu	Thr	Ser	Gly	Pro	Pro	Arg	Ala	Cys	Pro	Pro	Glu	Pro	Pro	Pro	Glu

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His Trp Glu Glu Asp Ala Ser Trp Gly Pro His Arg Leu Ala Val Leu					
100		105		110	
Val Pro Phe Arg Glu Arg Phe Glu Glu Leu Leu Val Phe Val Pro His					
115		120		125	
Met Arg Arg Phe Leu Ser Arg Lys Lys Ile Arg His His Ile Tyr Val					
130		135		140	
Leu Asn Gln Val Asp His Phe Arg Phe Asn Arg Ala Ala Leu Ile Asn					
145		150		155	160
Val Gly Phe Leu Glu Ser Ser Asn Ser Thr Asp Tyr Ile Ala Met His					
165		170		175	
Asp Val Asp Leu Leu Pro Leu Asn Glu Glu Leu Asp Tyr Gly Phe Pro					
180		185		190	
Glu Ala Gly Pro Phe His Val Ala Ser Pro Glu Leu His Pro Leu Tyr					
195		200		205	
His Tyr Lys Thr Tyr Val Gly Gly Ile Leu Leu Leu Ser Lys Gln His					
210		215		220	
Tyr Arg Leu Cys Asn Gly Met Ser Asn Arg Phe Trp Gly Trp Gly Arg					
225		230		235	240
Glu Asp Asp Glu Phe Tyr Arg Arg Ile Lys Gly Ala Gly Leu Gln Leu					
245		250		255	
Phe Arg Pro Ser Gly Ile Thr Thr Gly Tyr Lys Thr Phe Arg His Leu					
260		265		270	
His Asp Pro Ala Trp Arg Lys Arg Asp Gln Lys Arg Ile Ala Ala Gln					
275		280		285	
Lys Gln Glu Gln Phe Lys Val Asp Arg Glu Gly Gly Leu Asn Thr Val					
290		295		300	
Lys Tyr His Val Ala Ser Arg Thr Ala Leu Ser Val Gly Gly Ala Pro					
305		310		315	320
Cys Thr Val Leu Asn Ile Met Leu Asp Cys Asp Lys Thr Ala Thr Pro					
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<210> 5137

<211> 3090

<212> DNA

<213> Homo sapiens

<400> 5137

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120

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180

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240

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420

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<210> 5138

<211> 371

<212> PRT

<213> Homo sapiens

<400> 5138

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			20					25					30		
Ala	Pro	Leu	Asp	Trp	Ala	Leu	Pro	Leu	Ser	Glu	Val	Pro	Ser	Asp	Trp
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Glu	Val	Asp	Asp	Leu	Leu	Cys	Ser	Leu	Leu	Ser	Pro	Pro	Ala	Ser	Leu
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Asn	Ile	Leu	Ser	Ser	Ser	Asn	Pro	Cys	Leu	Val	His	His	Asp	His	Thr
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<210> 5139
<211> 1968
<212> DNA
<213> Homo sapiens
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1968

<210> 5140

<211> 443

<212> PRT

<213> Homo sapiens

<400> 5140

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Asn	His	Thr	Gly	Glu	Leu	Leu	Ala	Thr	Gly	Asp	Lys	Gly	Gly	Arg	Val
			35				40					45			
Val	Ile	Phe	Gln	Arg	Glu	Gln	Glu	Ser	Lys	Asn	Gln	Val	His	Arg	Arg
	50					55				60					
Gly	Glu	Tyr	Asn	Val	Tyr	Ser	Thr	Phe	Gln	Ser	His	Glu	Pro	Glu	Phe
65					70					75				80	
Asp	Tyr	Leu	Lys	Ser	Leu	Glu	Ile	Glu	Glu	Lys	Ile	Asn	Lys	Ile	Arg
			85					90						95	
Trp	Leu	Pro	Gln	Gln	Asn	Ala	Ala	Tyr	Phe	Leu	Leu	Ser	Thr	Asn	Asp
			100					105						110	
Lys	Thr	Val	Lys	Leu	Trp	Lys	Val	Ser	Glu	Arg	Asp	Lys	Arg	Pro	Glu
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Gly	Tyr	Asn	Leu	Lys	Asp	Glu	Glu	Gly	Arg	Leu	Arg	Asp	Pro	Ala	Thr
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Ile	Thr	Thr	Leu	Arg	Val	Pro	Val	Leu	Arg	Pro	Met	Asp	Leu	Met	Val
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Glu	Ala	Thr	Pro	Arg	Arg	Val	Phe	Ala	Asn	Ala	His	Thr	Tyr	His	Ile
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Ser	Ser	Ser	Lys	Gly	Thr	Ile	Arg	Leu	Cys	Asp	Met	Arg	Ala	Ser	Ala
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Phe	Ser	His	Ser	Gly	Arg	Tyr	Ile	Met	Thr	Arg	Asp	Tyr	Leu	Thr	Val
	290					295					300				
Lys	Val	Trp	Asp	Leu	Asn	Met	Glu	Ser	Arg	Pro	Val	Glu	Thr	His	Gln
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Val	His	Asp	Tyr	Leu	Arg	Ser	Lys	Leu	Cys	Ser	Leu	Tyr	Glu	Asn	Asp
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Cys	Ile	Phe	Asp	Lys	Phe	Glu	Cys	Val	Trp	Asn	Gly	Ser	Asp	Ser	Val
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Ile	Met	Thr	Gly	Ser	Tyr	Asn	Asn	Phe	Phe	Arg	Met	Phe	Asp	Arg	Asp

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Arg Ala Ile Leu Lys	Pro Arg Lys Val Cys Val	Gly Gly Lys Arg Arg
385	390	395
Lys Asp Glu Ile Ser	Val Asp Ser Leu Asp Phe	Ser Lys Lys Ile Leu
405	410	415
His Thr Ala Trp His	Pro Val Asp Asn Val Ile	Ala Val Ala Ala Thr
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<210> 5141
 <211> 928
 <212> DNA
 <213> Homo sapiens

<400> 5141
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<210> 5142
 <211> 227
 <212> PRT

<213> Homo sapiens

<400> 5142

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 35 40 45
 Asn Gln Glu His Glu Val Glu Leu Glu Leu Leu Arg Glu Asp Asn Glu
 50 55 60
 Gln Leu Leu Thr Gln Tyr Glu Arg Glu Lys Ala Leu Arg Arg Gln Ala
 65 70 75 80
 Glu Glu Lys Phe Ile Glu Phe Glu Asp Ala Leu Glu Gln Glu Lys Lys
 85 90 95
 Glu Leu Gln Ile Gln Val Glu His Tyr Glu Phe Gln Thr Arg Gln Leu
 100 105 110
 Glu Leu Lys Ala Lys Asn Tyr Ala Asp Gln Ile Ser Arg Leu Glu Glu
 115 120 125
 Arg Glu Ser Glu Met Lys Lys Glu Tyr Asn Ala Leu His Gln Arg His
 130 135 140
 Thr Glu Met Ile Gln Thr Tyr Val Glu His Ile Glu Arg Ser Lys Met
 145 150 155 160
 Gln Gln Val Gly Gly Asn Ser Gln Thr Glu Ser Ser Leu Pro Gly Arg
 165 170 175
 Ser Arg Lys Glu Arg Pro Thr Ser Leu Asn Val Phe Pro Leu Ala Asp
 180 185 190
 Gly Thr Val Arg Ala Gln Ile Gly Gly Lys Leu Val Pro Ala Gly Asp
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<210> 5143

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 5143

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<210> 5144

<211> 218

<212> PRT

<213> Homo sapiens

<400> 5144

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35 40 45
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 50 55 60
 Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala
 65 70 75 80
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 85 90 95
 Leu Lys Tyr Asp Pro Asp Pro Ala Pro His Met Glu Asn Leu Lys Cys
 100 105 110
 Arg Gly Glu Thr Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu
 115 120 125
 Pro Ala Leu Ile Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met
 130 135 140
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 Cys His Arg Lys Pro Asp Ala Lys Pro Glu Asn Phe Ile Thr Gln Ile
 165 170 175
 Glu Thr Thr Pro Thr Glu Thr Ala Ser Arg Lys Thr Ser Asp Met Val
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<210> 5145

<211> 1885

<212> DNA

<213> Homo sapiens

<400> 5145

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<210> 5146

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5146

Pro	Ala	Thr	Ser	Glu	Lys	Glu	Ser	Ile	Leu	Leu	Phe	Pro	Asp	Leu	Arg
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		20						25					30		
Arg	Leu	Gly	Val	Cys	Thr	Gly	Leu	Ala	Cys	Ala	Tyr	His	Leu	Leu	Cys
		35					40					45			
Thr	Pro	Pro	Thr	Pro	Cys	Ile	Pro	Thr	Pro	Gly	Leu	Val	Ala	Pro	Ala

50 55 60
 Leu Gly Lys Val Ser Pro Cys Ala Cys Thr Arg Arg Gln Thr Glu Lys
 65 70 75 80
 Ala Ala Gly Gly Leu Cys Cys Ser Ala Arg Gly Ser Ala Leu Pro Pro
 85 90 95
 Ser Phe Leu Leu Leu Ile Ala Pro Val Cys Gly Ala Tyr Thr Pro Thr
 100 105 110
 Ser Cys Asn Lys Ile Val Ala Ser Ala Lys Lys Pro Gly Ile Arg Thr
 115 120 125
 Gly Ile Gln Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly
 130 135 140
 Asn Pro Gly Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala
 145 150 155 160
 Arg Gly Ile Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile
 165 170 175
 Lys Asp Gln Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro
 180 185 190
 Met Gly Gly Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu
 195 200 205
 Glu Pro Tyr Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly
 210 215 220
 Tyr Tyr Tyr Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu
 225 230 235 240
 Ser Ile Val Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe
 245 250 255
 Cys Asp Thr Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met
 260 265 270
 Val Leu Gln Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro
 275 280 285
 Lys Lys Gly His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser
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 Gly Phe Leu Ile Phe Pro Ser Ala
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<210> 5147

<211> 2943

<212> DNA

<213> Homo sapiens

<400> 5147

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 gccaccgct tcgtgctggc ggccggcagc gccgtctttg acgcatgtt caacggcggc
 180
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 240
 ctgctgagat ttctatattc agatgaagtt caaattggtc cagaaacagt tatgaccact
 300
 ctttatactg ccaagaaata cgcagtccca gccttgggaag cacactgtgt agaatttctc
 360
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 420

gaacctcagc ttgctagtct ttgtctagat acaatagaca aaagcacaat ggatgcaata
480
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540
acactcagta ttcgagaaag tcgacttttt ggagctgttg tacgctgggc agaagcagaa
600
tgtcagagac aacaattacc tgtgactttt gggataaac aaaaagtctt aggaaaagca
660
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720
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780
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1920
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1980
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2040

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 2160
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 2280
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 2340
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 2400
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 2520
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 2760
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<210> 5148

<211> 296

<212> PRT

<213> Homo sapiens

<400> 5148

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Ile	Asp	Lys	Ser	Thr	Met	Asp	Ala	Ile	Ser	Ala	Glu	Gly	Phe	Thr	Asp
	20							25					30		
Ile	Asp	Ile	Asp	Thr	Leu	Cys	Ala	Val	Leu	Glu	Arg	Asp	Thr	Leu	Ser
	35						40					45			
Ile	Arg	Glu	Ser	Arg	Leu	Phe	Gly	Ala	Val	Val	Arg	Trp	Ala	Glu	Ala
	50					55					60				
Glu	Cys	Gln	Arg	Gln	Gln	Leu	Pro	Val	Thr	Phe	Gly	Asn	Lys	Gln	Lys
65				70						75				80	
Val	Leu	Gly	Lys	Ala	Leu	Ser	Leu	Ile	Arg	Phe	Pro	Leu	Met	Thr	Ile
			85					90						95	
Glu	Glu	Phe	Ala	Ala	Gly	Pro	Ala	Gln	Ser	Gly	Ile	Leu	Ser	Asp	Arg
			100					105					110		
Glu	Val	Val	Asn	Leu	Phe	Leu	His	Phe	Thr	Val	Asn	Pro	Lys	Pro	Arg

115	120	125
Val Glu Tyr Ile Asp Arg Pro Arg Cys Cys Leu Arg Gly Lys Glu Cys		
130	135	140
Cys Ile Asn Arg Phe Gln Val Glu Ser Arg Trp Gly Tyr Ser Gly		
145	150	155
Thr Ser Asp Arg Ile Arg Phe Thr Val Asn Arg Arg Ile Ser Ile Val		
165	170	175
Gly Phe Gly Leu Tyr Gly Ser Ile His Gly Pro Thr Asp Tyr Gln Val		
180	185	190
Asn Ile Gln Ile Ile Glu Tyr Glu Lys Lys Gln Thr Leu Gly Gln Asn		
195	200	205
Asp Thr Gly Phe Ser Cys Asp Gly Thr Ala Asn Thr Phe Arg Val Met		
210	215	220
Phe Lys Glu Pro Ile Glu Ile Leu Pro Asn Val Cys Tyr Thr Ala Cys		
225	230	235
Ala Thr Leu Lys Gly Pro Asp Ser His Tyr Gly Thr Lys Gly Leu Lys		
245	250	255
Lys Val Val His Glu Thr Pro Ala Ala Ser Lys Thr Val Phe Phe Phe		
260	265	270
Phe Ser Ser Pro Gly Asn Asn Asn Gly Thr Ser Ile Glu Asp Gly Gln		
275	280	285
Ile Pro Glu Ile Ile Phe Tyr Thr		
290	295	

<210> 5149

<211> 533

<212> DNA

<213> Homo sapiens

<400> 5149

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120

gataacatcc ccaaagaaga aaaacatagg cgagaagagg aagctatgaa gcagataacc
180

cagctcctac cagaggacct cagaaaggag ctctatgaac tttgggaaga gtacgagacc
240

caatctagtg cagaagccaa atttgtgaag cagctagacc aatgtgaaat gattcttcaa
300

gcattctgaat atgaagacct tgaacacaaa cctgggagac tgcaagactt ctatgattcc
360

acagcaggaa aattcaatca ccctgagata gtccagcttg tttctgaact tgaggcagaa
420

agaagcacta acatagctgc agctgccagt gagccacact cctgagacac tctctaaatt
480

gctgcactcc tgtaacaaac attattttcc atttcattgt attgtgtttt gca
533

<210> 5150

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5150

Xaa Arg Met Ala Val Met Ala Met Gly Ile Lys Asp Asp Arg Leu Asn
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 Lys Asp Arg Cys Val Arg Leu Ala Leu Val His Asp Met Ala Glu Cys
 20 25 30
 Ile Val Gly Asp Ile Ala Pro Ala Asp Asn Ile Pro Lys Glu Glu Lys
 35 40 45
 His Arg Arg Glu Glu Glu Ala Met Lys Gln Ile Thr Gln Leu Leu Pro
 50 55 60
 Glu Asp Leu Arg Lys Glu Leu Tyr Glu Leu Trp Glu Glu Tyr Glu Thr
 65 70 75 80
 Gln Ser Ser Ala Glu Ala Lys Phe Val Lys Gln Leu Asp Gln Cys Glu
 85 90 95
 Met Ile Leu Gln Ala Ser Glu Tyr Glu Asp Leu Glu His Lys Pro Gly
 100 105 110
 Arg Leu Gln Asp Phe Tyr Asp Ser Thr Ala Gly Lys Phe Asn His Pro
 115 120 125
 Glu Ile Val Gln Leu Val Ser Glu Leu Glu Ala Glu Arg Ser Thr Asn
 130 135 140
 Ile Ala Ala Ala Ala Ser Glu Pro His Ser
 145 150

<210> 5151

<211> 2273

<212> DNA

<213> Homo sapiens

<400> 5151

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 120
 gagcctgagg cggcgagctc ccggggcagc cctgtgcgag tgaagcggga gttcgagcgg
 180
 gcgagcgagc gcgaggcccc ggcttctgtt gtcccglttg tgcgggtgaa gcgggagcgc
 240
 gaggtcgatg aggactcgga gcctgagcgg gaggtgcgag caaagaatgg ccgagtggat
 300
 tctgaggacc ggaggagcgg ccactgcctg tacctggaca ccattaacag gactgtgctg
 360
 gactttgact ttgagaaact gtgttctatc tccctctcac acatcaatgc ttatgcctgt
 420
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 480
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 540
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 660
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 720
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 780

cggaactact ttctggaaga agacaattat aagaacatca aacgtcctcc aggggatatc
840
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900
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960
acttttcaga tcaccaaaca aggagatggc gttgactttc tgtcttggtt tctgaatgct
1020
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1080
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1140
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1560
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1980
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2100
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2220
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2273

<210> 5152

<211> 324

<212> PRT

<213> Homo sapiens

<400> 5152

Met Phe Ser Ser Thr Ser Thr Pro Ser Ser Phe Thr Ala Phe Gln Thr
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 20 25 30
 Lys Pro Thr Phe Thr Lys Gln Gln Ile Ala Asn Leu Asp Lys Gln Ala
 35 40 45
 Lys Leu Ser Arg Ala Tyr Asp Gly Thr Thr Tyr Leu Pro Gly Ile Val
 50 55 60
 Gly Leu Asn Asn Ile Lys Ala Asn Asp Tyr Ala Asn Ala Val Leu Gln
 65 70 75 80
 Ala Leu Ser Asn Val Pro Pro Leu Arg Asn Tyr Phe Leu Glu Asp
 85 90 95
 Asn Tyr Lys Asn Ile Lys Arg Pro Pro Gly Asp Ile Met Phe Leu Leu
 100 105 110
 Val Gln Arg Phe Gly Glu Leu Met Arg Lys Leu Trp Asn Pro Arg Asn
 115 120 125
 Phe Lys Ala His Val Ser Pro His Glu Met Leu Gln Ala Val Val Leu
 130 135 140
 Cys Ser Lys Lys Thr Phe Gln Ile Thr Lys Gln Gly Asp Gly Val Asp
 145 150 155 160
 Phe Leu Ser Trp Phe Leu Asn Ala Leu His Ser Ala Leu Gly Gly Thr
 165 170 175
 Lys Lys Lys Lys Lys Thr Ile Val Thr Asp Val Phe Gln Gly Ser Met
 180 185 190
 Arg Ile Phe Thr Lys Lys Leu Pro His Pro Asp Leu Pro Ala Glu Glu
 195 200 205
 Lys Glu Gln Leu Leu His Asn Asp Glu Tyr Gln Glu Thr Met Val Glu
 210 215 220
 Ser Thr Phe Met Tyr Leu Thr Leu Asp Leu Pro Thr Ala Pro Leu Tyr
 225 230 235 240
 Lys Asp Glu Lys Glu Gln Leu Ile Ile Pro Gln Val Pro Leu Phe Asn
 245 250 255
 Ile Leu Ala Lys Phe Asn Gly Ile Thr Glu Lys Glu Tyr Lys Thr Tyr
 260 265 270
 Lys Glu Asn Phe Leu Lys Arg Phe Gln Leu Thr Lys Leu Pro Pro Tyr
 275 280 285
 Leu Ile Phe Cys Ile Lys Ile Phe Thr Lys Asn Asn Phe Phe Val Glu
 290 295 300
 Lys Asn Pro Thr Ser Cys Gln Phe Pro Tyr Tyr Lys Cys Gly Ser Glu
 305 310 315 320
 Arg Ile Leu Val

<210> 5153

<211> 640

<212> DNA

<213> Homo sapiens

<400> 5153

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 120
 ggggtccacgt tgggagggac aggtgagctg gcctttgggtg ctgacacact cctgactttg
 180
 ccctttctcc tgcaggggggt gccattcccg cagaatgagg ctaatgccat ggatgtgggtg
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 420
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 540
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<210> 5154

<211> 162

<212> PRT

<213> Homo sapiens

<400> 5154

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Leu	Glu	Arg	Thr	Thr	Ser	Pro	Thr	Ile	Pro	Ser	Phe	Tyr	Thr	Phe	Ser
		20						25					30		
Ala	Cys	His	Arg	Trp	Leu	Gln	Glu	Gly	Ser	Thr	Leu	Gly	Gly	Thr	Gly
		35				40					45				
Glu	Leu	Ala	Phe	Gly	Ala	Asp	Thr	Leu	Leu	Thr	Leu	Pro	Phe	Leu	Leu
	50					55					60				
Gln	Gly	Val	Pro	Phe	Pro	Gln	Asn	Glu	Ala	Asn	Ala	Met	Asp	Val	Val
65					70					75				80	
Val	Gln	Phe	Ala	Ile	His	Arg	Leu	Gly	Phe	Gln	Pro	Gln	Asp	Ile	Ile
			85					90					95		
Ile	Tyr	Ala	Trp	Ser	Ile	Gly	Gly	Phe	Thr	Ala	Thr	Trp	Ala	Ala	Met
		100						105				110			
Ser	Tyr	Pro	Asp	Val	Ser	Ala	Met	Ile	Leu	Asp	Ala	Ser	Phe	Asp	Asp
		115					120					125			
Leu	Val	Pro	Leu	Ala	Leu	Lys	Val	Met	Pro	Asp	Ser	Trp	Ser	Glu	Cys
	130					135					140				
Ser	Ser	Gln	Ala	Cys	Pro	Ser	Trp	Glu	Gly	Val	Gly	Trp	Asn	Trp	Glu
145					150					155					160
Leu	Phe														

<210> 5155

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5155
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120
tgacattgac ttctccactg caaccatcga gttcattgtc tcctaaacct tgccatggag
180
gcctgtggca cctgagccag ccattatcat caccagcact tccatgagct acaagctgga
240
cccactgcag tcctcctgac aactgaaat cagagcctgc acacagagca gcagatgctt
300
caatgtaaag gtcatttcca ggctcctgac aggcgtgcat ctgggccaga tccatggcaa
360
taaccttcag gttgaggcta gagggttca gatgggcagc ttcgaatgac aggagcaagg
420
aacaagaggc cggaaaggga gggtagacatt ttcagcatct ataagatcaa ctttagaaat
480
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540
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600
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660
agacactcct gagctcccaa caccgggcaa ctctcttcca gaggatattg ggggtggaggg
720
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780
cgtaaaccaa ctttggttta cagttagaca ccagttttcg gcagatgaaa tccctctgat
840
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900
gagtagcagt cccacagaca aagcatccag cccctgcact gagacagtat aggggaaggga
960
cttggctctg gcagacagga cagataatca acatcctagt gggccttaca catgtgggca
1020
tattcttttc cataccttct tgtctgtttt aacaagctaa cccagtcac agtagcagag
1080
agagggtcca tcctaactta gctgaccagg ctggattcct aatcataaaa ccaaaaaagg
1140
aagaacctaa ccatttctct ctttcagcta tgtgttccaa gattactgaa gcaggattct
1200
ggccttctg ataagaacat gaccagatcc agctggtttg caacaagatg aacttcagt
1260
ctgagcttcc accaagtttt tctcactaca atctcattgt aatactaaaa tctccacca
1320
agatggagggt tatctgccat tttctgtact ctgctccgtt gtgctgctag agccacaagc
1380
ctattaaact ttgcctgaaa ta
1402

<210> 5156

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5156

Met Asp Leu Ala Gln Met His Ala Cys Gln Gly Pro Gly Asn Asp Leu
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 Tyr Ile Glu Ala Ser Ala Ala Leu Cys Ala Gly Ser Asp Phe Ser Val
 20 25 30
 Ser Gly Gly Leu Gln Trp Val Gln Leu Val Ala His Gly Ser Ala Gly
 35 40 45
 Asp Asp Asn Gly Trp Leu Arg Cys His Arg Pro Pro Trp Gln Gly Leu
 50 55 60
 Gly Asp Asn Glu Leu Asp Gly Cys Ser Gly Glu Val Asn Val Ser Gln
 65 70 75 80
 Asp Phe Val Lys Thr Leu Leu Arg Ile Cys Asn Ala Ile Pro Ser Phe
 85 90 95
 Arg Gly Leu Leu Glu Ser Cys Met Phe Gly Cys Arg Ala Arg Val Thr
 100 105 110
 Arg Asn Phe Trp Thr Leu
 115

<210> 5157

<211> 1310

<212> DNA

<213> Homo sapiens

<400> 5157

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<210> 5158

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5158

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			20				25					30			
Gln	Glu	Leu	Ala	Ile	Arg	Tyr	Val	Leu	Cys	Gly	Gln	Ser	Ala	Ser	Gln
	35					40					45				
Thr	His	Arg	Cys	Ser	Pro	Ala	Trp	Leu	Ser	Trp	Asp	Leu	Asn	Leu	Leu
	50					55				60					
Val	Lys	Ser	Phe	Ser	Leu	Ser	Glu	Val	Pro	Ser	Leu	Gln	Met	Leu	Asn
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<210> 5159

<211> 3233

<212> DNA

<213> Homo sapiens

<400> 5159

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 2160
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<210> 5160

<211> 849

<212> PRT

<213> Homo sapiens

<400> 5160

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Thr	His	Asp	Arg	Met	Lys	Asp	Val	Lys	Arg	His	Ile	Thr	Ala	Arg	Leu
		20					25				30				
Asp	Trp	Gly	Asn	Glu	Gln	Leu	Gly	Leu	Asp	Leu	Val	Pro	Arg	Lys	Glu

35 40 45
 Tyr Ala Met Val Asp Pro Glu Asp Ile Ser Ile Thr Glu Leu Tyr Arg
 50 55 60
 Leu Ser Met Leu Ile Met Phe Leu Leu Gly Gly Val Ile Gln Met Glu
 65 70 75 80
 His Arg His Arg Lys Lys Asp Thr Pro Val Gln Ala Ser Ser His His
 85 90 95
 Leu Phe Val Gln Met Lys Ser Leu Met Cys Ser Asn Leu Gly Glu Glu
 100 105 110
 Leu Glu Val Ile Phe Ser Leu Phe Asp Ser Lys Glu Asn Arg Pro Ile
 115 120 125
 Ser Glu Arg Phe Phe Leu Arg Leu Asn Arg Asn Gly Leu Pro Lys Ala
 130 135 140
 Pro Asp Lys Pro Glu Arg His Cys Ser Leu Phe Val Asp Leu Gly Ser
 145 150 155 160
 Ser Glu Leu Arg Lys Asp Ile Tyr Ile Thr Val His Ile Ile Arg Ile
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 Gly Arg Met Gly Ala Gly Glu Lys Lys Asn Ala Cys Ser Val Gln Tyr
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 Arg Arg Pro Phe Gly Cys Ala Val Leu Ser Ile Ala Asp Leu Leu Thr
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 Gly Glu Thr Lys Asp Asp Leu Ile Leu Lys Val Tyr Met Cys Asn Thr
 210 215 220
 Glu Ser Glu Trp Tyr Gln Ile His Glu Asn Ile Ile Lys Lys Leu Asn
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 Gln Leu Leu His Gly Asp Ile Glu Gln Ile Arg Arg Glu Tyr Ser Ser
 260 265 270
 Val Phe Ser His Gly Val Ser Ile Thr Arg Lys Leu Gly Phe Ser Asn
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 Ile Ile Met Pro Gly Glu Met Arg Asn Asp Leu Tyr Ile Thr Ile Glu
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 Arg Gly Glu Phe Glu Lys Gly Gly Lys Ser Val Ala Arg Asn Val Glu
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 Ile Ser Phe Gly Ser Gly Glu Pro Pro Ala Ser Glu Tyr His Ser Phe
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 405 410 415
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 Thr Ser Phe Leu Cys Ser Thr Lys Leu Thr Gln Asn Gly Asp Met Leu

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 Tyr Gly Ser Lys Val Phe Asp Ser Leu Val His Ile Ile Asn Leu Leu
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 Gln Asp Ser Lys Phe His His Phe Lys Pro Val Met Asp Thr Tyr Ile
 545 550 555 560
 Glu Ser His Phe Ala Gly Ala Leu Ala Tyr Arg Asp Leu Ile Lys Val
 565 570 575
 Leu Lys Trp Tyr Val Asp Arg Ile Thr Glu Ala Glu Arg Gln Glu His
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 595 600 605
 Gln Ser Arg Arg Leu Phe Ser Leu Ala Thr Gly Gly Gln Asn Glu Glu
 610 615 620
 Glu Phe Arg Cys Cys Ile Gln Glu Leu Leu Met Ser Val Arg Phe Phe
 625 630 635 640
 Leu Ser Gln Glu Ser Lys Gly Ser Gly Ala Leu Ser Gln Ser Gln Ala
 645 650 655
 Val Phe Leu Ser Ser Phe Pro Ala Val Tyr Ser Glu Leu Leu Lys Leu
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 Phe Asp Val Arg Glu Val Ala Asn Leu Val Gln Asp Thr Leu Gly Ser
 675 680 685
 Leu Pro Thr Ile Leu His Val Asp Asp Ser Leu Gln Ala Ile Lys Leu
 690 695 700
 Gln Cys Ile Gly Lys Thr Val Glu Ser Gln Leu Tyr Thr Asn Pro Asp
 705 710 715 720
 Ser Arg Tyr Ile Leu Leu Pro Val Val Leu His His Leu His Ile His
 725 730 735
 Leu Gln Glu Gln Lys Asp Leu Ile Met Cys Ala Arg Ile Leu Ser Asn
 740 745 750
 Val Phe Cys Leu Ile Lys Lys Asn Ser Ser Glu Lys Ser Val Leu Glu
 755 760 765
 Glu Ile Asp Val Ile Val Ala Ser Leu Leu Asp Ile Leu Leu Arg Thr
 770 775 780
 Ile Leu Glu Ile Thr Ser Arg Pro Gln Pro Ser Ser Ser Ala Met Arg
 785 790 795 800
 Phe Gln Phe Gln Asp Val Thr Gly Glu Phe Val Ala Cys Leu Leu Ser
 805 810 815
 Leu Leu Arg Gln Met Thr Asp Arg His Tyr Gln Gln Leu Leu Asp Ser
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<210> 5161

<211> 1645

<212> DNA

<213> Homo sapiens

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<210> 5162
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 5162
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 35 40 45
 Leu Val Gln Ala Asn Thr Pro Ala Ser Leu Val Gly Leu Arg Phe Gly
 50 55 60
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 65 70 75 80
 His Lys Ala His Gln Val Val Lys Lys Ala Ser Gly Asp Lys Ile Val
 85 90 95
 Val Val Val Arg Asp Arg Pro Phe Gln Arg Thr Val Thr Met His Lys
 100 105 110
 Asp Ser Met Gly His Val Gly Phe Val Ile Lys Lys Gly Lys Ile Val
 115 120 125
 Ser Leu Val Lys Gly Ser Ser Ala Ala Cys Asn Gly Leu Leu Thr Asn
 130 135 140
 His Tyr Val Cys Glu Val Asp Gly Gln Asn Val Ile Gly Leu Lys Asp
 145 150 155 160
 Lys Lys Ile Met Glu Ile Leu Ala Thr Ala Gly Asn Val Val Thr Leu
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 180 185 190
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<210> 5163
 <211> 1187
 <212> DNA
 <213> Homo sapiens

<400> 5163
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<210> 5164

<211> 213

<212> PRT

<213> Homo sapiens

<400> 5164

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		20						25					30		
Arg	His	Trp	Ala	Trp	Ser	Gly	Asp	Thr	Phe	Ser	Gly	Gln	Phe	Val	Leu
		35					40					45			
Gly	Glu	Pro	Gln	Gly	Tyr	Gly	Val	Met	Glu	Tyr	Lys	Ala	Gly	Gly	Cys
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Tyr	Glu	Gly	Glu	Val	Ser	His	Gly	Met	Arg	Glu	Gly	His	Gly	Phe	Leu
65				70						75				80	
Val	Asp	Arg	Asp	Gly	Gln	Val	Tyr	Gln	Gly	Ser	Phe	His	Asp	Asn	Lys
				85					90					95	
Arg	His	Gly	Pro	Gly	Gln	Met	Leu	Phe	Gln	Asn	Gly	Asp	Lys	Tyr	Asp
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Gly	Asp	Trp	Val	Arg	Asp	Arg	Arg	Gln	Gly	His	Gly	Val	Leu	Arg	Cys
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Ala	Asp	Gly	Ser	Thr	Tyr	Lys	Gly	Gln	Trp	His	Ser	Asp	Val	Phe	Ser

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 165 170 175
 Gly Pro Glu Val Met Glu Val Ala Gln Gly Ser Pro Phe Ser Val Asn
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 Val Gln Leu Leu Gln Asp His Gly Glu Ile Ala Lys Ser Lys His Leu
 195 200 205
 Gln Gly Glu Met Thr
 210

<210> 5165

<211> 2370

<212> DNA

<213> Homo sapiens

<400> 5165

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<210> 5166

<211> 521

<212> PRT

<213> Homo sapiens

<400> 5166

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 Ala Asp Arg Arg Ser Leu Pro Gly Thr Trp Thr Arg Ser Ser Pro Glu
 35 40 45
 His Thr Thr Ile Leu Arg Gly Gly Val Arg Arg Cys Leu Gln Gln Gln
 50 55 60
 Cys Glu Gln Thr Val Arg Ile Leu His Ala Lys Val Ala Gln Lys Ser
 65 70 75 80
 Tyr Gly Asn Glu Lys Arg Phe Phe Cys Pro Pro Cys Val Tyr Leu
 85 90 95
 Ser Gly Pro Gly Trp Arg Val Lys Pro Gly Gln Asp Gln Ala His Gln
 100 105 110
 Ala Gly Glu Thr Gly Pro Thr Val Cys Gly Tyr Met Gly Leu Asp Ser
 115 120 125
 Ala Ser Gly Ser Ala Thr Glu Thr Gln Lys Leu Asn Phe Glu Gln Gln
 130 135 140
 Pro Asp Ser Arg Glu Phe Gly Cys Ala Lys Thr Leu Tyr Ile Ser Asp
 145 150 155 160
 Ala Asp Lys Arg Lys His Phe Arg Leu Val Leu Arg Leu Val Leu Arg
 165 170 175
 Gly Gly Arg Glu Leu Gly Thr Phe His Ser Arg Leu Ile Lys Val Ile
 180 185 190
 Ser Lys Pro Ser Gln Lys Lys Gln Ser Leu Lys Asn Thr Asp Leu Cys
 195 200 205
 Ile Ser Ser Gly Ser Lys Val Ser Leu Phe Asn Arg Leu Arg Ser Gln
 210 215 220
 Thr Val Ser Thr Arg Tyr Leu Ser Val Glu Asp Gly Ala Phe Val Ala
 225 230 235 240
 Ser Ala Arg Gln Trp Ala Ala Phe Thr Leu His Leu Ala Asp Gly His
 245 250 255
 Ser Ala Gln Gly Asp Phe Pro Pro Arg Glu Gly Tyr Val Arg Tyr Gly
 260 265 270
 Ser Leu Val Gln Leu Val Cys Thr Val Thr Gly Ile Thr Leu Pro Pro
 275 280 285
 Met Ile Ile Arg Lys Val Ala Lys Gln Cys Ala Leu Leu Asp Val Asp
 290 295 300
 Glu Pro Ile Ser Gln Leu His Lys Cys Ala Phe Gln Phe Pro Gly Ser
 305 310 315 320
 Pro Pro Gly Gly Gly Thr Tyr Leu Cys Leu Ala Thr Glu Lys Val
 325 330 335
 Val Gln Phe Gln Ala Ser Pro Cys Pro Lys Glu Ala Asn Arg Ala Leu
 340 345 350
 Leu Asn Asp Ser Ser Cys Trp Thr Ile Ile Gly Thr Glu Ser Val Glu
 355 360 365
 Phe Ser Phe Ser Thr Ser Leu Ala Cys Thr Leu Glu Pro Val Thr Pro
 370 375 380
 Val Pro Leu Ile Ser Thr Leu Glu Leu Ser Gly Gly Asp Val Ala
 385 390 395 400
 Thr Leu Glu Leu His Gly Glu Asn Phe His Ala Gly Leu Lys Val Trp
 405 410 415
 Phe Gly Asp Val Glu Ala Glu Thr Met Tyr Arg Tyr Gly Val Xaa Ser
 420 425 430
 Pro Arg Ser Leu Val Cys Val Val Pro Asp Val Ala Ala Phe Cys Ser
 435 440 445
 Asp Trp Arg Trp Leu Arg Ala Pro Ile Thr Ile Pro Met Ser Leu Val

450 455 460
 Arg Ala Asp Gly Leu Phe Tyr Pro Ser Ala Phe Ser Phe Thr Tyr Thr
 465 470 475 480
 Pro Glu Tyr Ser Val Arg Pro Gly His Pro Gly Val Pro Glu Pro Ala
 485 490 495
 Thr Asp Ala Asp Ala Leu Leu Glu Ser Ile His Gln Glu Phe Thr Arg
 500 505 510
 Thr Asn Phe His Leu Phe Ile Gln Thr
 515 520

<210> 5167
 <211> 878
 <212> DNA
 <213> Homo sapiens

<400> 5167
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 ttggactgtg tgctgcagac acaatatccc aggtctatga gaatgtcaat acagacttca
 180
 cgtgggaaat ggtgaggcaa taaggatcgt ttcccttgat gaaatggagc ttgcagaaga
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 300
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 480
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 540
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 600
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 720
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 780
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 878

<210> 5168
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 5168
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		20						25					30		
Ser	Arg	Ala	Asp	Cys	Leu	Gly	Ala	Pro	Asn	Ile	Arg	Thr	Ala	Pro	Leu
		35					40					45			
Gly	Arg	Ser	Glu	Lys	Arg	Thr	Ala	Ile	Cys	Phe	Ser	Thr	Gly	Ala	Gln
		50				55					60				
Asp	Ser	Ser	Gln	Arg	Ala	Pro	Phe	Arg	Leu	Gln	Asn	Pro	Gly	Gln	Leu
65					70					75					80
Leu	Gln	Thr	Ser	Val	Arg	Asn	Leu	Val	Pro	Ser	Ile	Leu	His	Thr	Ser
				85					90					95	
Tyr	His	Ala	Ile	Phe	Asn	Pro	Arg	Thr	Trp	Val	Leu	Leu	Cys	Pro	Cys
		100						105					110		
Asp	Ile	Trp	Gly	Thr	Gln	Gly	Pro	Glu	Lys	Gly	Arg	Lys	Ile	Thr	His
		115					120					125			
Ala	Gly	Thr	Leu	Ser	Pro	Gln	Val	Lys	Leu	Arg	Thr	Gly	Asn	Gly	Lys
		130				135					140				
Gln	Gly	Gly	Ser	Thr	Glu	Ala	Gly	Asn	Ser	Gly	Val	Ile	Ala	Trp	Leu
145					150					155					160
Ser	Leu	Glu	Cys	Thr	Pro	Ser	Thr	Ser	Thr	Gln	Ser	Ser	Pro	Gln	Leu
			165					170						175	
Thr	Leu	Pro	Ser	Ser	Ala	Ser	Ser	Ile	Ser	Ser	Arg	Glu	Thr	Ile	Leu
		180						185						190	
Ile	Ala	Ser	Pro	Phe	Pro	Thr									
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<210> 5169

<211> 609

<212> DNA

<213> Homo sapiens

<400> 5169

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120

gtggagctta gcctcagcga gttcctgcta ctcttcacca ctgctggcat ctacgtggat
180

ggcgaggcc gcaagtctcg tggccacgag ctggttggtg cagcagcgcc catgggctgg
240

gggtatgagg cccctacct gacagtgttc agcgagaact ccacgatgt gtttgacgtg
300

aggagggcag aatgggtgca gaccgtgccg ctcaagaagg tgcggcccct caatccagag
360

ggctccctgt tcctctacgg caccgagaag gtccgctga cctacctcag gaaccagctg
420

gcagagaagg acgagttcga catcccgac ctcaccgaca acagccggcg ccagctgttc
480

ctaccaaga gcaagcgccg cttctttttc cgcgtgtcgg aggagcagca gaagcagcag
540

cgcagggaga tgctgaagga cccttttgtg cgtccaagc tcctctcgcc gcctaccaac
600

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609

<210> 5170
 <211> 203
 <212> PRT
 <213> Homo sapiens

<400> 5170
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 20 25 30
 Gly Leu Gly Glu Ala Leu Gly Ala Val Glu Leu Ser Leu Ser Glu Phe
 35 40 45
 Leu Leu Leu Phe Thr Thr Ala Gly Ile Tyr Val Asp Gly Ala Gly Arg
 50 55 60
 Lys Ser Arg Gly His Glu Leu Leu Trp Pro Ala Ala Pro Met Gly Trp
 65 70 75 80
 Gly Tyr Ala Ala Pro Tyr Leu Thr Val Phe Ser Glu Asn Ser Ile Asp
 85 90 95
 Val Phe Asp Val Arg Arg Ala Glu Trp Val Gln Thr Val Pro Leu Lys
 100 105 110
 Lys Val Arg Pro Leu Asn Pro Glu Gly Ser Leu Phe Leu Tyr Gly Thr
 115 120 125
 Glu Lys Val Arg Leu Thr Tyr Leu Arg Asn Gln Leu Ala Glu Lys Asp
 130 135 140
 Glu Phe Asp Ile Pro Asp Leu Thr Asp Asn Ser Arg Arg Gln Leu Phe
 145 150 155 160
 Leu Thr Lys Ser Lys Arg Arg Phe Phe Phe Arg Val Ser Glu Glu Gln
 165 170 175
 Gln Lys Gln Gln Arg Arg Glu Met Leu Lys Asp Pro Phe Val Arg Ser
 180 185 190
 Lys Leu Ile Ser Pro Pro Thr Asn Phe Asn His
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<210> 5171
 <211> 2060
 <212> DNA
 <213> Homo sapiens

<400> 5171
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 240
 ggtggcagag ctgcttgctc tgcagatcat tcctttgaga gaggagtaca agtgaagaaa
 300
 caaggaggca cttcctgtag gagcactgat gtgccttgct cacactcccc tctgagcttt
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 420

acagcgagga tggaaatgga aaggaaccga actaaaatgc atttcccttt gcagggcaga
480
gagctaagct cttaggaata gtgttataga aataagcacc ctaacttcaa ttctgaaaa
540
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600
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660
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720
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780
tgagcagcaa ggacagcctg ggtttcaa at gccacttccc ctgctttagg gatccaggtg
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1020
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1440
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2040

aaaaaaaaaa aaaaaaaaaa

2060

<210> 5172

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5172

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Ser Val Ala Ile Asn Lys Ser Ser Gly Ala Pro Arg Arg Val Pro Ala
20 25 30
Gln Gly Ser Ile Lys Asp His Thr Ala Gly Leu Arg Leu Thr Ala Leu
35 40 45
Ser Pro Glu His Gln Ser Pro Ala Glu Ser Gly Asp Asn Thr Ser Ser
50 55 60
Leu Gln Arg Gly Thr Ser Pro Pro Ala Ala Thr Ser Leu Arg Leu Leu
65 70 75 80
Leu Ser Ser Lys Asp Ser Leu Gly Phe Lys Cys His Phe Pro Cys Phe
85 90 95
Arg Asp Pro Gly Val Leu Ile Ala
100

<210> 5173

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5173

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120
tcacagtgtg acaggggagac aaatagacct gtcagtagat aacatgaaaa taattggact
180
atgtgctgca gacacaatat cccagggtcta tgagaatgtc aatacagact tcacgtggga
240
aatgggtgagg caataaggat cgtttccctt gatgaaatgg agcttgacaga agaaggcagg
300
gtcagttgtg gggagctctg gttggagggtg gagggagtg attccaagct ggaggagctg
360
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420
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540
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557

<210> 5174

<211> 93

<212> PRT

<213> Homo sapiens

<400> 5174

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Met Glu Leu Ala Glu Glu Gly Arg Val Ser Cys Gly Glu Leu Trp Leu
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Glu Val Glu Gly Val His Ser Lys Leu Glu Glu Leu Ser Arg Val Leu
           20           25           30
Glu Thr Lys Arg Ser Pro Leu Gly Thr Val Leu Ser Pro Gly Ala Glu
           35           40           45
Thr Asp Arg Gly Ser Leu Leu Gly Pro Pro Glu Lys Arg Cys Pro Asp
           50           55           60
Ile Trp Cys Ser Gln Ala Val Ser Pro Ala Gly Leu Cys Phe Pro Asp
65           70           75           80
Arg Gln Thr Ser Pro Ser Leu Ser Leu Ser Gly Lys Met
           85           90

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<210> 5175

<211> 272

<212> DNA

<213> Homo sapiens

<400> 5175

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ttcggagcca gccagcctca ctgtgcgtgg cccacaacag ctgtctccat gtgtcacgtg
120
agggctgccc aacaccaggt agggcagcaa cgcccacgcc ctgcgcgggc acagcctccc
180
agaggtcact gccatgccgc actgaccgga gagagggcag tggtgagagg tgcattgccac
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cccaggttg ttccgaaggc cennnnnncc nc
272

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<210> 5176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5176

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Met Ala Ala Pro Glu Thr Arg Trp Arg Gly Asn His Pro Thr Leu Pro
 1           5           10           15
Ser Arg Glu Leu Arg Ser Gln Pro Ala Ser Leu Cys Val Ala His Asn
           20           25           30
Ser Cys Leu His Val Ser Arg Glu Gly Cys Pro Thr Pro Gly Arg Ala
           35           40           45
Ala Thr Pro Thr Pro Ser Pro Gly Thr Ala Ser Gln Arg Ser Leu Pro
           50           55           60
Cys Arg Thr Asp Arg Arg Glu Gly Ser Gly Glu Arg Cys Met Pro Pro
65           70           75           80
Gln Ala Cys Ser Glu Gly Pro Xaa Xaa Xaa
           85           90

```

<210> 5177

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5177

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120
gaagaacccc gatcgctgag gagcaagggg gcgctaggaa agggaactgg gttgcgacgg
180
tccggcgaga gagagctggg gtgctggggg gcggggaagt tggggagcag aggccgcttg
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420
gagcttgaag atggggaaat cagtgcgac gataataaca gccagatacg ggtcggagc
480
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540
gcccgggggc gtggatctgg cggaggcggg ggtcttctct cgtcatcgtc ctcttctcag
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637

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<210> 5178

<211> 92

<212> PRT

<213> Homo sapiens

<400> 5178

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Lys Glu Glu Gly Glu Leu Glu Asp Gly Glu Ile Ser Asp Asp Asp Asn
20          25          30
Asn Ser Gln Ile Arg Ser Arg Ser Ser Ser Ser Ser Ser Gly Gly Gly
35          40          45
Leu Leu Pro Tyr Pro Arg Arg Arg Pro Pro His Ser Ala Arg Gly Gly
50          55          60
Gly Ser Gly Gly Gly Gly Gly Ser Ser Ser Ser Ser Ser Ser Ser Gln
65          70          75          80
Gln Gln Leu Arg Asn Phe Ser Arg Ser Arg His Ala
85          90

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<210> 5179

<211> 1527

<212> DNA

<213> Homo sapiens

<400> 5179

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120
gatgccatgt ggctggacat agagcacact gagggcaaga ggtacttcac ctgggacaaa
180
aacagattcc ctaaccccaa gaggatgcaa gagctgctca ggaacaaaaa gcgtaagctt
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480
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540
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1080
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<212> PRT

<213> Homo sapiens

<400> 5180

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<211> 4961

<212> DNA

<213> Homo sapiens

<400> 5181

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<211> 697

<212> PRT

<213> Homo sapiens

<400> 5182

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Arg	Arg	Gly	Leu	Ser	Ile	Ser	Gly	Asn	Gly	Pro	Cys	Leu	Gly	Phe	Arg
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<210> 5184

<211> 395

<212> PRT

<213> Homo sapiens

<400> 5184

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<210> 5185

<211> 1657

<212> DNA

<213> Homo sapiens

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<210> 5186

<211> 243

<212> PRT

<213> Homo sapiens

<400> 5186

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      20           25           30
Leu Ala Ile Tyr Ser Ser Leu Val Ser Gln Ile Ser Leu Cys His Pro
      35           40           45
Gly Trp Ser Thr Val Val Arg Ser Gln Leu Thr Ala Thr Ser Ala Ser
      50           55           60
Arg Phe Lys Arg Phe Ala Cys Leu Cys Leu Ser Tyr Val Pro Phe Arg
65           70           75           80
Lys Ile Leu Leu Gln Glu Lys Ile Trp Phe Gln Asp Val Ser Trp Thr
      85           90           95
Gly Gly His Val Pro Arg Val Pro Arg Thr Gly Trp Val Tyr Arg Asn
      100          105          110
Val Gln Arg Pro Glu Ser Val Ser Asp His Met Tyr Arg Met Ala Val
      115          120          125
Met Ala Met Val Ile Lys Asp Asp Arg Leu Asn Lys Asp Xaa Glu Ala
      130          135          140
Met Lys Gln Ile Thr Gln Leu Leu Pro Glu Asp Leu Arg Lys Glu Leu
      145          150          155          160
Tyr Glu Leu Trp Glu Glu Tyr Glu Thr Gln Ser Ser Ala Glu Ala Lys
      165          170          175
Phe Val Lys Gln Leu Asp Gln Cys Glu Met Ile Leu Gln Ala Ser Glu
      180          185          190
Tyr Glu Asp Leu Glu His Lys Pro Gly Arg Leu Gln Asp Phe Tyr Asp
      195          200          205
Ser Thr Ala Gly Lys Phe Asn His Pro Glu Ile Val Gln Leu Val Ser
      210          215          220
Glu Leu Glu Ala Glu Arg Ser Thr Asn Ile Ala Ala Ala Ser Glu
      225          230          235          240
Pro His Ser

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<210> 5187

<211> 1712

<212> DNA

<213> Homo sapiens

<400> 5187

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cccgaggaa gcaccatgat ttcggccgcg cagttgttgg atgagttaat gggccgggac
180
cgaaacctag ccccgacga gaagcgcagc aacgtgcggt gggaccacga gagcgtttgt
240
aaatattatc tctgtggttt ttgtcctgcg gaattgttca caaatacacg ttctgatctt
300

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ggtcctgtgtg aaaaaattca tgatgaaaat ctacgaaaac agtatgagaa gagctctcgt
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ttcatgaaag ttggctatga gagagatttt ttgcgatact tacagagctt acttgcagaa
420
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1140
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1260
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1320
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1380
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1440
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1560
ccccattag tgtgctctt tggaattat cgccacatt tgtaatatag tcgccattga
1620
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1712

<210> 5188

<211> 489

<212> PRT

<213> Homo sapiens

<400> 5188

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 20 25 30
 Ser Val Cys Lys Tyr Tyr Leu Cys Gly Phe Cys Pro Ala Glu Leu Phe
 35 40 45
 Thr Asn Thr Arg Ser Asp Leu Gly Pro Cys Glu Lys Ile His Asp Glu
 50 55 60
 Asn Leu Arg Lys Gln Tyr Glu Lys Ser Ser Arg Phe Met Lys Val Gly
 65 70 75 80
 Tyr Glu Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val
 85 90 95
 Glu Arg Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn
 100 105 110
 Gln Gln Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Glu Glu Lys
 115 120 125
 Ile Gln Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu
 130 135 140
 Glu Leu Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys
 145 150 155 160
 Leu Val Glu Gln Leu Lys Glu Glu Arg Glu Leu Leu Arg Ser Thr Thr
 165 170 175
 Ser Thr Ile Glu Ser Phe Ala Ala Gln Glu Lys Gln Met Glu Val Cys
 180 185 190
 Glu Val Cys Gly Ala Phe Leu Ile Val Gly Asp Ala Gln Ser Arg Val
 195 200 205
 Asp Asp His Leu Met Gly Lys Gln His Met Gly Tyr Ala Lys Ile Lys
 210 215 220
 Ala Thr Val Glu Glu Leu Lys Glu Lys Leu Arg Lys Arg Thr Glu Glu
 225 230 235 240
 Pro Asp Arg Asp Glu Arg Leu Lys Lys Glu Lys Gln Glu Arg Glu Glu
 245 250 255
 Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Lys Arg
 260 265 270
 Arg Arg Glu Glu Glu Arg Glu Lys Glu Arg Ala Arg Asp Arg Glu
 275 280 285
 Arg Arg Lys Arg Ser Arg Ser Arg Ser Arg His Ser Ser Arg Thr Ser
 290 295 300
 Asp Arg Arg Cys Ser Arg Ser Arg Asp His Lys Arg Ser Arg Ser Arg
 305 310 315 320
 Glu Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg Ser Arg Ser His
 325 330 335
 Asp Arg Ser Glu Arg Lys His Arg Ser Arg Ser Arg Asp Arg Arg Arg
 340 345 350
 Ser Lys Ser Arg Asp Arg Lys Ser Tyr Lys His Arg Ser Lys Ser Arg
 355 360 365
 Asp Arg Glu Gln Asp Arg Lys Ser Lys Glu Lys Glu Lys Arg Gly Ser
 370 375 380
 Asp Asp Lys Lys Ser Ser Val Lys Ser Gly Ser Arg Glu Lys Gln Ser
 385 390 395 400
 Glu Asp Thr Asn Thr Glu Ser Lys Glu Ser Asp Thr Lys Asn Glu Val
 405 410 415
 Asn Gly Thr Ser Glu Asp Ile Lys Ser Glu Val Gln Arg Lys Tyr Ala

420 425 430
 Gln Met Lys Met Glu Leu Ser Arg Val Arg Arg His Thr Lys Ala Ser
 435 440 445
 Ser Glu Gly Lys Asp Ser Val Val Leu Gln Asn Ile Leu Arg Tyr Ile
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 Val Leu Ser Gln Leu Phe Cys Ser Arg Leu Val Pro Pro Leu Val Cys
 465 470 475 480
 Leu Phe Gly Asn Tyr Arg Pro His Leu
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<210> 5189
 <211> 323
 <212> DNA
 <213> Homo sapiens

<400> 5189
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 120
 aatccaaaaa taacaaaatg tttagcaatt caggtaatgt caagcagtat tcaaacacat
 180
 gaagttaatc attccttaat tctgtttat ttatatttca tttttgcttt ctttttactc
 240
 catgtgttat tctacagaa gtcacaagtt aaatgttttt ggggaacttt gggggggggg
 300
 gacaaacatc catgtgctgc taa
 323

<210> 5190
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5190
 Met Ser His Cys Thr Trp Pro Gly Glu Ile Val Phe Ile Thr Tyr Asp
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 Lys Cys Leu Ser Asn Ser Trp Leu Glu Ser Gly Leu Thr Ile Asn Asn
 20 25 30
 Trp Asn Pro Lys Ile Thr Lys Cys Leu Ala Ile Gln Val Met Ser Ser
 35 40 45
 Ser Ile Gln Thr His Glu Val Asn His Ser Leu Ile Pro Val Tyr Leu
 50 55 60
 Tyr Phe Ile Phe Ala Phe Phe Leu Leu His Val Leu Phe Leu Gln Lys
 65 70 75 80
 Ser Gln Val Lys Cys Phe Trp Gly Thr Leu Gly Gly Gly Asp Lys His
 85 90 95
 Pro Cys Ala Ala
 100

<210> 5191
 <211> 1632
 <212> DNA
 <213> Homo sapiens

<400> 5191
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cgggtcatcg gggagccct tccaagccc cgcaaacacc tgcattgaaa gaggcaggct
120
tccttctgac agcagataac atgtcgctg cggtcgcac aagaggcgca tgcgcttgc
180
cgtgggaggc cgggtgcgca ggactggaac ggggttcctc cttcttcccc gccccgccc
240
gcttccggcg gaagcggcct caacaaggga aactttattg ttcccgtagg gcagtcgagg
300
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420
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atccccgact tcaggggtcc ccacggagtc tggaccatgg aggagcgagg tctggcccc
540
aagttcgaca ccacctttga gagcgcgcgg ccacgcaga ccacatggc gctggtgcag
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660
cgctcaggct tccccagga caaactggca gagctccacg ggaacatgtt tgtggaagaa
720
tgtgccaagt gtaagacgca gtacgtccga gacacagtcg tgggcacat gggcctgaag
780
gccacgggcc ggctctgcac cgtggctaag gcaagggggc tgcgagcctg caggggaggc
840
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900
atcctagact gggaggactc cctgcccgac cgggacctgg cactcgccga tgaggccagc
960
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1020
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1140
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1260
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1320
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1380
cccaaaaggg ggctctggt gcggttcgg gaagaagcca cccccagag gtgacagctg
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ccccctacag cccaccctac ccctcctcca tgggccctgc aggaggggag acccaccttg
 1620
 aagtggggga tc
 1632

<210> 5192
 <211> 377
 <212> PRT
 <213> Homo sapiens

<400> 5192
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 Lys Cys Gly Leu Pro Glu Ile Phe Asp Pro Pro Glu Glu Leu Glu Arg
 20 25 30
 Lys Val Trp Glu Leu Ala Arg Leu Val Trp Gln Ser Ser Ser Val Val
 35 40 45
 Phe His Thr Gly Ala Gly Ile Ser Thr Ala Ser Gly Ile Pro Asp Phe
 50 55 60
 Arg Gly Pro His Gly Val Trp Thr Met Glu Glu Arg Gly Leu Ala Pro
 65 70 75 80
 Lys Phe Asp Thr Thr Phe Glu Ser Ala Arg Pro Thr Gln Thr His Met
 85 90 95
 Ala Leu Val Gln Leu Glu Arg Val Gly Leu Leu Arg Phe Leu Val Ser
 100 105 110
 Gln Asn Val Asp Gly Leu His Val Arg Ser Gly Phe Pro Arg Asp Lys
 115 120 125
 Leu Ala Glu Leu His Gly Asn Met Phe Val Glu Glu Cys Ala Lys Cys
 130 135 140
 Lys Thr Gln Tyr Val Arg Asp Thr Val Val Gly Thr Met Gly Leu Lys
 145 150 155 160
 Ala Thr Gly Arg Leu Cys Thr Val Ala Lys Ala Arg Gly Leu Arg Ala
 165 170 175
 Cys Arg Gly Gly Cys Glu Ala Pro Glu Asp Ser Pro Gln Leu Pro His
 180 185 190
 Cys Arg Gly Glu Leu Arg Asp Thr Ile Leu Asp Trp Glu Asp Ser Leu
 195 200 205
 Pro Asp Arg Asp Leu Ala Leu Ala Asp Glu Ala Ser Arg Asn Ala Asp
 210 215 220
 Leu Ser Ile Thr Leu Gly Thr Ser Leu Gln Ile Arg Pro Ser Gly Asn
 225 230 235 240
 Leu Pro Leu Ala Thr Lys Arg Arg Gly Gly Arg Leu Val Ile Val Asn
 245 250 255
 Leu Gln Pro Thr Lys His Asp Arg His Ala Asp Leu Arg Ile His Gly
 260 265 270
 Tyr Val Asp Glu Val Met Thr Arg Leu Met Lys His Leu Gly Leu Glu
 275 280 285
 Ile Pro Ala Trp Asp Gly Pro Arg Val Leu Glu Arg Ala Leu Pro Pro
 290 295 300
 Leu Pro Arg Pro Pro Thr Pro Lys Leu Glu Pro Lys Glu Glu Ser Pro
 305 310 315 320
 Thr Arg Ile Asn Gly Ser Ile Pro Ala Gly Pro Lys Gln Glu Pro Cys
 325 330 335
 Ala Gln His Asn Gly Ser Glu Pro Ala Ser Pro Lys Arg Glu Arg Pro

340 345 350
 Thr Ser Pro Ala Pro His Arg Pro Pro Lys Arg Gly Pro Leu Val Arg
 355 360 365
 Phe Arg Glu Glu Ala Thr Pro Gln Arg
 370 375

<210> 5193
 <211> 554
 <212> DNA
 <213> Homo sapiens

<400> 5193
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 120
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 180
 ctgtgccttg cagaccctgc agccctgggg atgctgtgtc gggacggacc cctagatata
 240
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 300
 gcagaattct caggggtgat ttccagcaac gctcctgggg agggtcagca ggggctgggg
 360
 tccgtggggg ggtctccggg aggtttgcct gtgtcaggcc tgtgctgctt ctggcggagg
 420
 cgcttgcca gctcatcca gctggtgtc tccggtgcca cgcgctaaca ccttcagtgc
 480
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 540
 tgccagcacc cggg
 554

<210> 5194
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 5194
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 Phe Pro Ala Thr Pro Pro Gly Arg Val Ser Arg Gly Trp Gly Pro Trp
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 Gly Gly Leu Arg Glu Val Cys Leu Cys Gln Ala Cys Ala Ala Ser Gly
 35 40 45
 Gly Gly Ala Cys Pro Ala Ser Ser Ser Leu Val Ser Pro Val Pro Arg
 50 55 60
 Ala Asn Thr Phe Ser Ala Arg Ser Gly Thr Arg Leu Glu Gly Pro Ala
 65 70 75 80
 Leu Pro Arg Pro Arg Leu Gln Pro Asp Ala Ala Ser Thr Arg
 85 90

<210> 5195
 <211> 964

<212> DNA

<213> Homo sapiens

<400> 5195

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 120
 ctgcggggccg tccagcggct gtgccacttc tacagcgccg tcatgcccag cgaggcccag
 180
 tgtgtcatct accatgagct ccagctctcc ctggcctgca aggtggccga caaggtgctg
 240
 gaggggcagc tcttgagac catcagccag ctctacctgt ccttgggcac cgagcggggc
 300
 tacaaatccg cactggacta caccaaacga agtctgggga ttttcattga cctccagaag
 360
 aaagagaagg aggcgcatgc ctggctgcaa gcagggaaga tctattacat cttgcggcag
 420
 agcgagctgg tggacctcta catccagggtg gcacagaacg tggccctgta cacaggcgac
 480
 cccaacctgg ggctggagct gtttgaggcg gctggagaca tcttcttcga cggggcctgg
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 960
 gccg
 964

<210> 5196

<211> 267

<212> PRT

<213> Homo sapiens

<400> 5196

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 Leu Ala Cys Lys Val Ala Asp Lys Val Leu Glu Gly Gln Leu Leu Glu
 20 25 30
 Thr Ile Ser Gln Leu Tyr Leu Ser Leu Gly Thr Glu Arg Ala Tyr Lys
 35 40 45
 Ser Ala Leu Asp Tyr Thr Lys Arg Ser Leu Gly Ile Phe Ile Asp Leu
 50 55 60
 Gln Lys Lys Glu Lys Glu Ala His Ala Trp Leu Gln Ala Gly Lys Ile

65		70		75		80									
Tyr	Tyr	Ile	Leu	Arg	Gln	Ser	Glu	Leu	Val	Asp	Leu	Tyr	Ile	Gln	Val
				85					90					95	
Ala	Gln	Asn	Val	Ala	Leu	Tyr	Thr	Gly	Asp	Pro	Asn	Leu	Gly	Leu	Glu
			100						105					110	
Leu	Phe	Glu	Ala	Ala	Gly	Asp	Ile	Phe	Phe	Asp	Gly	Ala	Trp	Glu	Arg
		115					120					125			
Glu	Lys	Ala	Val	Ser	Phe	Tyr	Arg	Asp	Arg	Ala	Leu	Pro	Leu	Ala	Val
	130						135					140			
Thr	Thr	Gly	Asn	Arg	Lys	Ala	Glu	Leu	Arg	Leu	Cys	Asn	Lys	Leu	Val
145					150					155					160
Ala	Leu	Leu	Ala	Thr	Leu	Glu	Glu	Pro	Gln	Glu	Gly	Leu	Glu	Phe	Ala
			165						170					175	
His	Met	Ala	Leu	Ala	Leu	Ser	Ile	Thr	Leu	Gly	Asp	Arg	Leu	Asn	Glu
		180							185				190		
Arg	Val	Ala	Tyr	His	Arg	Leu	Ala	Ala	Leu	Gln	His	Arg	Leu	Gly	His
	195						200					205			
Gly	Glu	Leu	Ala	Glu	His	Phe	Tyr	Leu	Lys	Ala	Leu	Ser	Leu	Cys	Asn
	210						215					220			
Ser	Pro	Leu	Glu	Phe	Asp	Glu	Glu	Thr	Leu	Tyr	Tyr	Val	Lys	Val	Tyr
225					230					235					240
Leu	Val	Leu	Gly	Asp	Ile	Ile	Phe	Tyr	Asp	Leu	Lys	Asp	Pro	Phe	Asp
			245						250					255	
Ala	Ala	Gly	Tyr	Tyr	Gln	Leu	Ala	Leu	Ala	Ala					
			260						265						

<210> 5197

<211> 1045

<212> DNA

<213> Homo sapiens

<400> 5197

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120

ctcatgatcc gccacctca gcctcgcaaa gtgctgggat tacaggcatg agccaccacg

180

tccggccacc actgactttt tcattctttc tcattcttcc tgggcccctcc tgctgttgta

240

ggcccccatg aagaagtga ctattctgag aaactgaagt tcagtgtatga tgaagaggag

300

gaagaagttg tgaaggacgg caggccaaag tggaacagtt gggaccctag gaggcagcgg

360

cagttgtcaa tgagctctgc agacagtgcg gacgctaagc ggactcgaga ggaagggag

420

gactgggctg aagcagtggg tgcgtcccgt gtggtccgaa aggcgccaga ccctcagcca

480

ccgcccagga agcttcatgg ctgggcacca ggcctgact accagaagtc atcaatgggc

540

agcatgttcc ggcaacagtc catcgaggac aaggaggaca agccccacc aaggcagaag

600

ttcattcagt cagagatgtc cgaggcgggtg gagcgagccc gaaagcgccg ggaagaagag

660

gagcgccgag cccgggagga gaggtggcc gcctgtgtg ccaaactcaa gcagctggac
 720
 cagaagtgtg agcaggcacg aaaggcaggt gagggccgga agcaggcaga gaaggaagtg
 780
 cctgtgtctc caagtgtgta gaaggcatct cccagggaaa acggccctgc tgtccacaaa
 840
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 900
 gtgtccccag cagtggcaca gagcaacagc agtgaggaag aggccagaga ggctgggtcc
 960
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 1020
 caacaacagc aggagcagct gtaca
 1045

<210> 5198

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5198

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Pro	His	Glu	Glu	Val	Asp	Tyr	Ser	Glu	Lys	Leu	Lys	Phe	Ser	Asp	Asp
		20						25					30		
Glu	Glu	Glu	Glu	Val	Val	Lys	Asp	Gly	Arg	Pro	Lys	Trp	Asn	Ser	
	35					40					45				
Trp	Asp	Pro	Arg	Arg	Gln	Arg	Gln	Leu	Ser	Met	Ser	Ser	Ala	Asp	Ser
	50				55					60					
Ala	Asp	Ala	Lys	Arg	Thr	Arg	Glu	Glu	Gly	Lys	Asp	Trp	Ala	Glu	Ala
65					70				75					80	
Val	Gly	Ala	Ser	Arg	Val	Val	Arg	Lys	Ala	Pro	Asp	Pro	Gln	Pro	Pro
			85					90					95		
Pro	Arg	Lys	Leu	His	Gly	Trp	Ala	Pro	Gly	Pro	Asp	Tyr	Gln	Lys	Ser
	100						105						110		
Ser	Met	Gly	Ser	Met	Phe	Arg	Gln	Gln	Ser	Ile	Glu	Asp	Lys	Glu	Asp
	115					120					125				
Lys	Pro	Pro	Pro	Arg	Gln	Lys	Phe	Ile	Gln	Ser	Glu	Met	Ser	Glu	Ala
	130				135						140				
Val	Glu	Arg	Ala	Arg	Lys	Arg	Arg	Glu	Glu	Glu	Glu	Arg	Arg	Ala	Arg
145					150					155				160	
Glu	Glu	Arg	Leu	Ala	Ala	Cys	Ala	Ala	Lys	Leu	Lys	Gln	Leu	Asp	Gln
			165					170					175		
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<211> 248

<212> PRT

<213> Homo sapiens

<400> 5206

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			20						25					30	
Asp	Arg	Arg	Lys	Leu	Arg	Ala	Asp	Val	Thr	Thr	Ala	Phe	Pro	Thr	Leu
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Gly	Thr	Asp	Gln	Val	Ser	Glu	Leu	Val	Pro	Gly	Lys	Glu	Glu	Leu	Asn

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 Ser Gly Gly Asn Pro Ile Leu Phe Glu Leu Glu Lys Asn Leu Tyr Pro
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 Thr Trp Pro Leu Val Leu Glu Lys Leu Val Gly Gly Ala Asp Leu Met
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 Ile Gly Val Ala Ala Met Ser Thr Ala Glu Met Leu Thr Ser Gly Leu
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 180 185 190
 Arg Ser Gly Asn Lys Ser Ser Pro Pro Ser Ile Ala Pro Leu Ala Leu
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 Asp Ser Ala Asp Leu Ser Glu Glu Lys Gly Ser Val Gln Met Asp Ser
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<210> 5207

<211> 594

<212> DNA

<213> Homo sapiens

<400> 5207

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<210> 5208

<211> 136

<212> PRT

<213> Homo sapiens

<400> 5208

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      20           25           30
Cys Val Pro Thr Thr Ala Arg Arg Leu Tyr Leu Pro Ala Val Val Met
      35           40           45
Asn Gly His Val His Asp Leu Gln Ile Leu Asp Phe Pro Pro Ile Ser
      50           55           60
Ala Phe Pro Val Asn Thr Leu Gln Glu Trp Ala Asp Thr Cys Cys Arg
      65           70           75           80
Gly Leu Arg Ser Val His Ala Tyr Ile Leu Val Tyr Asp Ile Cys Cys
      85           90           95
Phe Asp Ser Phe Glu Tyr Val Lys Thr Ile Arg Gln Gln Ile Leu Glu
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<210> 5209

<211> 1592

<212> DNA

<213> Homo sapiens

<400> 5209

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<210> 5210

<211> 85

<212> PRT

<213> Homo sapiens

<400> 5210

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			20					25					30		
Ala	Leu	Leu	Ile	Leu	Tyr	Ala	Leu	Leu	Ser	Arg	Leu	Thr	Gly	Ser	Arg
			35				40					45			
Ala	Ser	Gly	Ala	Gln	Leu	Glu	Ala	Lys	Val	Arg	Gly	Leu	Glu	Arg	Gln
	50					55				60					
Val	Glu	Glu	Leu	Arg	Trp	Arg	Gln	Arg	Arg	Ala	Ala	Lys	Gly	Ala	Arg
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<210> 5211

<211> 602

<212> DNA

<213> Homo sapiens

<400> 5211

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<210> 5212

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<212> PRT

<213> Homo sapiens

<400> 5212

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		20					25						30		
Arg	Ile	Lys	Ile	Asn	Glu	Glu	Phe	Lys	Asn	Asn	Lys	Ser	Glu	Thr	Ser
	35				40						45				
Ser	Lys	Lys	Ile	Glu	Glu	Leu	Met	Lys	Ile	Gly	Ser	Asp	Val	Glu	Leu
	50				55					60					
Leu	Leu	Arg	Thr	Ser	Val	Ile	Gln	Gly	Ile	His	Thr	Asp	His	Asn	Thr
65				70				75						80	
Leu	Lys	Leu	Val	Pro	Arg	Lys	Asp	Leu	Leu	Val	Glu	Asn	Val	Pro	Tyr
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Cys	Asp	Ala	Pro	Thr	Gln	Lys	Gln								
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<210> 5213

<211> 4387

<212> DNA

<213> Homo sapiens

<400> 5213

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<211> 1364

<212> PRT

<213> Homo sapiens

<400> 5214

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		20					25				30				
Glu	Lys	Thr	Lys	Leu	Ile	Ser	Cys	Leu	Gly	Ala	Phe	Arg	Gln	Phe	Trp
	35					40					45				
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Lys	Phe	Ile	His	Gly	Gln	His	Ser	Pro	Lys	Arg	Ile	Ser	Phe	Leu	Tyr

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 Gln Leu Trp Ala Leu Thr Phe Lys Leu Val Arg Lys Ile Ile Gly Gly
 115 120 125
 Val Asp Tyr Lys Gly Val Arg Asp Leu Leu Lys Val Ile Leu Glu Lys
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 260 265 270
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 Val Asp Leu Val Val Tyr Ala Met Glu Arg Ser Glu Thr Glu Glu Lys
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 Tyr Ser Thr Asn Ser Glu Cys Val Thr Leu Pro Met Gly Ala Leu Val
 485 490 495
 Glu Thr Ile Tyr Gly Asn Gly Ile Met Arg Leu Pro Leu Pro Gly Thr

500	505	510
Asn Cys Met Ala Ser Ala Ser Ile Thr Pro Leu Pro Met Asn Leu Leu		
515	520	525
Asp Ser Leu Thr Val His Ala Lys Met Ser Leu Ile His Ser Ile Ala		
530	535	540
Thr Arg Val Ile Lys Leu Ala His Ala Lys Ser Ser Val Ala Leu Ala		
545	550	555
Pro Ala Leu Val Glu Thr Tyr Ser Arg Leu Leu Val Tyr Met Glu Ile		
565	570	575
Glu Ser Leu Gly Ile Lys Gly Phe Ile Ser Gln Leu Leu Pro Thr Val		
580	585	590
Phe Lys Ser His Ala Trp Gly Ile Leu His Thr Leu Leu Glu Met Phe		
595	600	605
Ser Tyr Arg Met His His Ile Gln Pro His Tyr Arg Val Gln Leu Leu		
610	615	620
Ser His Leu His Thr Leu Ala Ala Val Ala Gln Thr Asn Gln Asn Gln		
625	630	635
Leu His Leu Cys Val Glu Ser Thr Ala Leu Arg Leu Ile Thr Ala Leu		
645	650	655
Gly Ser Ser Glu Val Gln Pro Gln Phe Thr Arg Phe Leu Ser Asp Pro		
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Lys Thr Val Leu Ser Ala Glu Ser Glu Glu Leu Asn Arg Ala Leu Ile		
675	680	685
Leu Thr Leu Ala Arg Ala Thr His Val Thr Asp Phe Phe Thr Gly Ser		
690	695	700
Asp Ser Ile Gln Gly Thr Trp Cys Lys Asp Ile Leu Gln Thr Ile Met		
705	710	715
Ser Phe Thr Pro His Asn Trp Ala Ser His Thr Leu Ser Cys Phe Pro		
725	730	735
Gly Pro Leu Gln Ala Phe Phe Lys Gln Asn Asn Val Pro Gln Glu Ser		
740	745	750
Arg Phe Asn Leu Lys Lys Asn Val Glu Glu Tyr Arg Lys Trp Lys		
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Ser Met Ser Asn Glu Asn Asp Ile Ile Thr His Phe Ser Met Gln Gly		
770	775	780
Ser Pro Pro Leu Phe Leu Cys Leu Leu Trp Lys Met Leu Leu Glu Thr		
785	790	795
Asp His Ile Asn Gln Ile Gly Tyr Arg Val Leu Glu Arg Ile Gly Ala		
805	810	815
Arg Ala Leu Val Ala His Val Arg Thr Phe Ala Asp Phe Leu Val Tyr		
820	825	830
Glu Phe Ser Thr Ser Ala Gly Gly Gln Gln Leu Asn Lys Cys Ile Glu		
835	840	845
Ile Leu Asn Asp Met Val Trp Lys Tyr Asn Ile Val Thr Leu Asp Arg		
850	855	860
Leu Ile Leu Cys Leu Ala Met Arg Ser His Glu Gly Asn Glu Ala Gln		
865	870	875
Val Cys Tyr Phe Ile Ile Gln Leu Leu Leu Lys Pro Asn Asp Phe		
885	890	895
Arg Asn Arg Val Ser Asp Phe Val Lys Glu Asn Ser Pro Glu His Trp		
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Leu Gln Asn Asp Trp His Thr Lys His Met Asn Tyr His Lys Lys Tyr		
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Pro Glu Lys Leu Tyr Phe Glu Gly Leu Ala Glu Gln Val Asp Pro Pro		

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 Gly Leu Tyr Lys Phe His Asp Arg Pro Val Thr Tyr Leu Tyr Asn Thr
 995 1000 1005
 Leu His Tyr Tyr Glu Met His Leu Arg Asp Arg Ala Phe Leu Lys Arg
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 Gly Arg Leu Val Asp Thr Met Ala Gly Lys Ser Pro Gly Pro Phe Pro
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 1185 1190 1195 1200
 Ser Glu Met Ser Cys Ser Tyr Thr Leu Ala Leu Ala His Ala Val Trp
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 His His Ser Ser Ile Gly Gln Leu Ser Leu Ile Pro Lys Phe Leu Thr
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 Arg Cys Met Ile Glu Ile Gly Val Ala Phe Tyr Asp Met Leu Leu Asn
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 Val Asp Gln Cys Ser Thr His Leu Asn Tyr Met Asp Pro Ile Cys Asp
 1285 1290 1295
 Phe Leu Tyr His Met Lys Tyr Met Phe Thr Gly Asp Ser Val Lys Glu
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 Gln Val Glu Lys Ile Ile Cys Asn Leu Lys Pro Ala Leu Lys Leu Arg
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<210> 5215
 <211> 548
 <212> DNA
 <213> Homo sapiens

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 360
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 420
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 548

<210> 5216
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 5216
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 20 25 30
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 35 40 45
 Arg Arg Ser Ala Val Gly Ser Met Leu Ser Asp Ser Ile Thr Pro His
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 Arg Glu Ile Phe His Glu Arg Lys Ser Pro Ser Leu Trp Pro Thr Phe
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 Leu Trp Ser

<210> 5217
 <211> 4189
 <212> DNA
 <213> Homo sapiens

<400> 5217

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<210> 5218

<211> 541

<212> PRT

<213> Homo sapiens

<400> 5218

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Ser	Trp	Ala	Met	Gly	Ser	Leu	Arg	Pro	Glu	Ala	Pro	Leu	Leu	Ser	Ser
		20						25					30		
Ser	Thr	Leu	Arg	Cys	Cys	Ser	Gly	Asn	Ser	Ser	Asp	Trp	Leu	Gly	Gly
		35					40					45			
Ser	Pro	Gly	Ala	Ala	Pro	Gly	Thr	Leu	Cys	Cys	Phe	Leu	Trp	Pro	Arg
		50				55					60				
Val	Gly	Thr	Gly	Leu	Cys	Pro	Gly	Leu	Ser	Leu	Pro	Gln	Pro	His	Leu
		65			70					75				80	
Pro	His	Cys	Gln	Pro	Gln	Ser	Leu	Pro	Ala	Xaa	Ala	Arg	Val	Leu	Ser
			85					90						95	
Ser	Ser	Glu	Thr	Pro	Ala	Arg	Thr	Leu	Pro	Phe	Thr	Thr	Gly	Leu	Ile
			100					105						110	
Tyr	Asp	Ser	Val	Met	Leu	Lys	His	Gln	Cys	Ser	Cys	Gly	Asp	Asn	Ser

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 Arg His Pro Glu His Ala Gly Arg Ile Gln Ser Ile Trp Ser Arg Leu
 130 135 140
 Gln Glu Arg Gly Leu Arg Ser Gln Cys Glu Cys Leu Arg Gly Arg Lys
 145 150 155 160
 Ala Ser Leu Glu Glu Leu Gln Ser Val His Ser Glu Arg His Val Leu
 165 170 175
 Leu Tyr Gly Thr Asn Pro Leu Ser Arg Leu Lys Leu Asp Asn Gly Lys
 180 185 190
 Leu Ala Gly Leu Leu Ala Gln Arg Met Phe Val Met Leu Pro Cys Gly
 195 200 205
 Gly Val Gly Val Asp Thr Asp Thr Ile Trp Asn Glu Leu His Ser Ser
 210 215 220
 Asn Ala Ala Arg Trp Ala Ala Gly Ser Val Thr Asp Leu Ala Phe Lys
 225 230 235 240
 Val Ala Ser Arg Glu Leu Lys Asn Gly Phe Ala Val Val Arg Pro Pro
 245 250 255
 Gly His His Ala Asp His Ser Thr Ala Met Gly Phe Cys Phe Phe Asn
 260 265 270
 Ser Val Ala Ile Ala Cys Arg Gln Leu Gln Gln Gln Ser Lys Ala Ser
 275 280 285
 Lys Ile Leu Ile Val Asp Trp Asp Val His His Gly Asn Ala Thr Gln
 290 295 300
 Gln Thr Phe Tyr Gln Asp Pro Ser Val Leu Tyr Ile Ser Leu His Arg
 305 310 315 320
 His Asp Asp Gly Asn Phe Phe Pro Gly Ser Gly Ala Val Asp Glu Val
 325 330 335
 Gly Ala Gly Ser Gly Glu Gly Phe Asn Val Asn Val Ala Trp Ala Gly
 340 345 350
 Gly Leu Asp Pro Pro Met Gly Asp Pro Glu Tyr Leu Ala Ala Phe Arg
 355 360 365
 Ile Val Val Met Pro Ile Ala Arg Glu Phe Ser Pro Asp Leu Val Leu
 370 375 380
 Val Ser Ala Gly Phe Asp Ala Ala Glu Gly His Pro Ala Pro Leu Gly
 385 390 395 400
 Gly Tyr His Val Ser Ala Lys Cys Phe Gly Tyr Met Thr Gln Gln Leu
 405 410 415
 Met Asn Leu Ala Gly Gly Ala Val Val Leu Ala Leu Glu Gly Gly His
 420 425 430
 Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ala Ala Leu
 435 440 445
 Leu Gly Asn Arg Val Asp Pro Leu Ser Glu Glu Gly Trp Lys Gln Lys
 450 455 460
 Pro Asn Leu Asn Ala Ile Arg Ser Leu Glu Ala Val Ile Arg Val His
 465 470 475 480
 Ser Lys Tyr Trp Gly Cys Met Gln Arg Leu Ala Ser Cys Pro Asp Ser
 485 490 495
 Trp Val Pro Arg Val Pro Gly Ala Asp Lys Glu Glu Val Glu Ala Val
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<210> 5219
<211> 1212
<212> DNA
<213> Homo sapiens

<400> 5219
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<210> 5220
<211> 179
<212> PRT
<213> Homo sapiens

<400> 5220

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 35 40 45
 Glu Pro Ser Ser Pro Asn Ala Ala Val Pro Glu Ala Ile Pro Thr Pro
 50 55 60
 Arg Ala Ala Ala Ser Ala Ala Leu Glu Leu Pro Leu Gly Pro Ala Pro
 65 70 75 80
 Val Ser Val Ala Pro Gln Ala Glu Ala Arg Ser Thr Pro Gly
 85 90 95
 Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe Arg Gln Arg Phe Arg
 100 105 110
 Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg Glu Ala Phe Arg Gln
 115 120 125
 Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro Asp Ile Arg Thr Lys
 130 135 140
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<210> 5221

<211> 497

<212> DNA

<213> Homo sapiens

<400> 5221

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<210> 5222

<211> 112

<212> PRT

<213> Homo sapiens

<400> 5222

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Ser	Leu	Val	Asp	Gly	Arg	Ile	Ile	Asp	Thr	Ser	Leu	Thr	Arg	Asp	Pro
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	50				55					60					
Ser	Leu	Leu	Asp	Met	Cys	Val	Gly	Glu	Lys	Arg	Arg	Ala	Ile	Ile	Pro
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Ser	His	Leu	Ala	Tyr	Gly	Lys	Arg	Gly	Phe	Pro	Pro	Ser	Val	Pro	Gly
		85					90					95			
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<210> 5223

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5223

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360
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420
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480
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<210> 5224

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5224

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 20 25 30
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 35 40 45
 Leu Arg Glu Gly Trp Arg Asp Ser His Gln Pro Ile Met Cys Ser Tyr
 50 55 60
 Lys Leu Val Thr Val Lys Phe Glu Val Trp Gly Leu Gln Thr Arg Val
 65 70 75 80
 Glu Gln Phe Val His Lys Val Val Arg Asp Ile Leu Leu Ile Gly His
 85 90 95
 Arg Gln Ala Phe Ala Trp Val Asp Glu Trp Tyr Asp Met Thr Met Asp
 100 105 110
 Asp Val Arg Glu Tyr Glu Lys Asn Met His Glu Gln Thr Asn Ile Lys
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 Gln Thr Ser Thr
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<210> 5225

<211> 394

<212> DNA

<213> Homo sapiens

<400> 5225

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<210> 5226

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5226

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 20 25 30
 Phe Ala Ser His Ile Pro Ala Asp Pro Pro Cys Leu Pro Pro Gly Leu
 35 40 45
 Gly Gly Ala Val Ser Thr Gly Gly Gln Ala Ile Ala Pro Ser Asp Gln

50		55		60
Gly Pro Leu Ser Trp Tyr Tyr Leu Phe Pro Trp Ala Cys Pro Ser Asp				
65		70		75
Gln Ala Cys Gln Asp Ser Ala Tyr Val Ser Pro Ser Pro Ser Ser Ala				
	85		90	95
Leu Gly Pro Ser Leu Pro Gln Pro Gln Leu Pro Pro Pro Gly Ser Pro				
	100		105	110
Pro				

<210> 5227

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 5227

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120

ggatgacggg catgccggca ggcacgtgt agaaggccag tgtggtaacc ttacctgtct

180

acctgaactt caccctgca gacctcatct tcaccgtgga ctctgaaatt gctacaaagg

240

aggatcctcg cagcttctac gagcgggggtg tcgcagtctt gtgcacagag taaacttttc

300

tagctgcccc tttctgtaat agtgaaagt ggtatttaac atttattcat ttttaaata

360

tttgaagggt ctgagcttgt gaaaagaaag tgggtgtct gaggttgag gaagctgaat

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480

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540

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600

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660

actcctctaa taaatgtgga tgaaaatgtg gcagaattgg ttggtatact caaagaacct

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780

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840

attcgtattc ttggtattca caaaagagct ggggaaccac tgggtgtgac atttaggggt

900

gaaaataatg atctggtaat tgcccgaatc ctccatgggg gaatgataga tcgacaagg

960

ctacttcattg tgggagatat aattaaagaa gtcaatggcc atgagggttg aaataatcca

1020

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1080

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1140

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<210> 5228

<211> 550

<212> PRT

<213> Homo sapiens

<400> 5228

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Asn	Leu	Thr	Glu	Leu	Pro	Ser	Ser	Thr	Gly	Ala	Glu	Glu	Ile	Asp	Leu
			20					25					30		
Ile	Phe	Leu	Lys	Gly	Ile	Met	Glu	Asn	Pro	Ile	Val	Lys	Ser	Leu	Ala

4408

465 470 475 480
 Val Val Asp Ala Gly Ile Thr Thr Lys Leu Leu Thr Asp Ser Asp Leu
 485 490 495
 Lys Lys Thr Val Asp Glu Ser Ala Arg Ile Gln Arg Ala Tyr Asn His
 500 505 510
 Tyr Phe Asp Leu Ile Ile Ile Asn Asp Asn Leu Asp Lys Ala Phe Glu
 515 520 525
 Lys Leu Gln Thr Ala Ile Glu Lys Leu Arg Met Glu Pro Gln Trp Val
 530 535 540
 Pro Ile Ser Trp Val Tyr
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<210> 5229

<211> 1031

<212> DNA

<213> Homo sapiens

<400> 5229

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 180
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 240
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 300
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 660
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 720
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 780
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 1031

<210> 5230
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 5230
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 20 25 30
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 35 40 45
 Glu Lys Asn Glu Glu Glu Lys Gln Leu His Arg Lys Arg Ala Val Ser
 50 55 60
 Gln Val Pro Pro Thr Val Leu Cys Arg Glu Pro Val Gly Glu Ala Lys
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 Trp Gly Glu Trp Gly Thr Ser Gly Gly Arg Pro Gln Gly Thr Ser Trp
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<210> 5231
 <211> 845
 <212> DNA
 <213> Homo sapiens

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 660
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 720
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840

cttaa

845

<210> 5232

<211> 201

<212> PRT

<213> Homo sapiens

<400> 5232

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		20					25					30			
Ser	Pro	Val	Arg	Thr	Leu	Gln	Val	Glu	Thr	Leu	Val	Glu	Pro	Pro	Glu
		35				40						45			
Pro	Cys	Ala	Glu	Pro	Ala	Ala	Phe	Gly	Asp	Thr	Leu	His	Ile	His	Tyr
	50				55					60					
Thr	Gly	Ser	Leu	Val	Asp	Gly	Arg	Ile	Ile	Asp	Thr	Ser	Leu	Thr	Arg
65				70					75					80	
Asp	Pro	Leu	Val	Ile	Glu	Leu	Gly	Gln	Lys	Gln	Val	Ile	Pro	Gly	Leu
			85						90					95	
Glu	Gln	Ser	Leu	Asp	Met	Cys	Val	Gly	Glu	Lys	Arg	Arg	Ala	Ile	
		100					105					110			
Ile	Pro	Ser	His	Leu	Ala	Tyr	Gly	Lys	Arg	Gly	Phe	Pro	Pro	Ser	Val
	115						120					125			
Pro	Ala	Asp	Ala	Val	Val	Gln	Tyr	Asp	Val	Glu	Leu	Ile	Ala	Leu	Ile
	130					135					140				
Arg	Ala	Asn	Tyr	Trp	Leu	Lys	Leu	Val	Lys	Gly	Ile	Leu	Pro	Leu	Val
145					150					155				160	
Gly	Met	Ala	Met	Val	Pro	Ala	Leu	Leu	Gly	Leu	Ile	Gly	Tyr	His	Leu
			165						170					175	
Tyr	Arg	Lys	Ala	Asn	Arg	Pro	Lys	Val	Ser	Lys	Lys	Lys	Leu	Lys	Glu
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<211> 2801

<212> DNA

<213> Homo sapiens

<400> 5233

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2801

<210> 5234

<211> 57

<212> PRT

<213> Homo sapiens

<400> 5234

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Leu	Asp	Thr	Arg	Ser	Ser	Arg	Pro	Val	Trp	Gln	Arg	Gly	Glu	Thr	Thr
		20					25					30			
Ile	Ile	Ser	Lys	Glu	Thr	Pro	Pro	Pro	Pro	Arg	Leu	Ile	Phe	Lys	Lys
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Leu	Ala	Val	Pro	Val	Val	Pro	Ala	Thr							
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<210> 5235

<211> 3017

<212> DNA

<213> Homo sapiens

<400> 5235

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2460
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2580
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<210> 5236

<211> 178

<212> PRT

<213> Homo sapiens

<400> 5236

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Pro Pro Thr Trp Glu Ser Pro Gly Asp Asp Ala Ser Leu Glu His Glu			
35	40	45	
Ala Glu Met Asp Leu Gly Thr Pro Thr Tyr Asp Glu Asn Pro Met Lys			
50	55	60	
Ala Ser Lys Lys Pro Lys Thr Ala Glu Ala Asp Thr Ser Ser Glu Leu			
65	70	75	80
Ala Lys Lys Ser Lys Glu Val Phe Arg Lys Glu Met Ser Gln Phe Ile			
85	90	95	
Val Gln Cys Leu Asn Pro Tyr Arg Lys Pro Asp Cys Lys Val Gly Arg			
100	105	110	
Ile Thr Thr Thr Glu Asp Phe Lys His Leu Ala Arg Lys Leu Thr His			
115	120	125	
Gly Val Met Asn Lys Glu Leu Lys Tyr Cys Lys Asn Pro Glu Asp Leu			
130	135	140	
Glu Cys Asn Glu Asn Val Lys His Lys Thr Lys Glu Tyr Ile Lys Lys			
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Tyr Met Gln Lys Phe Gly Ala Val Tyr Lys Pro Lys Glu Asp Thr Glu			
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Leu Glu			

<210> 5237

<211> 1238

<212> DNA

<213> Homo sapiens

<400> 5237

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 180
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 240
 gctggtgttc atctgtgcca tggaatgtct tacccaattt caggtttagt gaagatgtat
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 480
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 660
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 960
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 1020
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 1080
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 1140
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 1200
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 1238

<210> 5238

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5238

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Pro	Lys	Ala	Ala	Pro	Tyr	Ser	Val	Gly	Ile	Ala	Asn	Val	Asp	Val	Leu
		20						25					30		
Leu	Leu	Gly	Ile	Tyr	Ile	Ile	His	Arg	Ala	Val	Arg	Asn	Pro	Asp	Asp
	35						40				45				
Leu	Glu	Ala	Arg	Ser	His	Met	His	Leu	Ala	Ser	Ala	Phe	Ala	Gly	Ile
	50					55				60					
Gly	Phe	Gly	Asn	Ala	Gly	Val	His	Leu	Cys	His	Gly	Met	Ser	Tyr	Pro
65					70				75					80	
Ile	Ser	Gly	Leu	Val	Lys	Met	Tyr	Lys	Ala	Lys	Asp	Tyr	Asn	Val	Asp
				85				90						95	
His	Pro	Leu	Val	Pro	His	Gly	Leu	Ser	Val	Val	Leu	Thr	Ser	Pro	Ala
		100					105						110		
Val	Phe	Thr	Phe	Thr	Ala	Gln	Met	Phe	Pro	Glu	Arg	His	Leu	Glu	Met
	115					120						125			
Ala	Glu	Ile	Leu	Gly	Ala	Asp	Thr	Arg	Thr	Ala	Arg	Ile	Gln	Asp	Ala
	130				135						140				
Gly	Leu	Val	Leu	Ala	Asp	Thr	Leu	Arg	Lys	Phe	Leu	Phe	Asp	Leu	Asp
145					150					155				160	
Val	Asp	Asp	Gly	Leu	Ala	Ala	Val	Gly	Tyr	Ser	Lys	Ala	Asp	Ile	Pro
			165					170						175	
Ala	Leu	Val	Lys	Gly	Thr	Leu	Pro	Gln	Glu	Arg	Val	Thr	Lys	Leu	Ala
		180					185						190		
Pro	Arg	Pro	Gln	Ser	Glu	Glu	Asp	Leu	Ala	Ala	Leu	Phe	Glu	Ala	Ser
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<210> 5239
<211> 2061
<212> DNA
<213> Homo sapiens

<400> 5239
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120
taaaaacaaa agaggtgagt gagaatcgtc acctttctgc tttccttcct cacttggcca
180
ggctctagta ctccaccttt gagctgccat gcccaatagg ggaagtccaa aattaaaaat
240
acaaccggtg tagaagaaaa taaatgggga gtgaaataga agaaaagatg agggagggga
300
gtgctaatat ttacactaga gttttataga caactgtccc attccatccc aattccaatc
360
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420
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480
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540
gaagtgcaga cagtatccaa gctccagggg ataggctgag gacctgagg ctccagttccc
600
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720
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900
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960
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1080
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1440

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 2040
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<210> 5240

<211> 226

<212> PRT

<213> Homo sapiens

<400> 5240

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Ser	Pro	Ser	Trp	Leu	Val	Ser	Val	Leu	Pro	Thr	Ser	Leu	Leu	Ser	Leu
		20						25				30			
Ser	Ala	Gly	Gly	Thr	Pro	Ser	Gly	Cys	Thr	Val	Ala	Gly	Gly	Leu	Gly
	35						40				45				
Ala	Ser	Gly	Gly	Val	Gly	Ser	Thr	Gly	Thr	Gly	Ala	Ser	Pro	Pro	Thr
	50					55				60					
Thr	Val	Ala	Ile	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65				70				75						80	
Ser	Ser	Glu	Ser	Val	Ser	Leu	Gly	Gly	Ala	Trp	Gly	Gly	Pro	Gly	Gly
			85					90					95		
Gly	Ser	Leu	Ser	Pro	Arg	Ser	Ala	Phe	Phe	Asn	Phe	Arg	Phe	Leu	Leu
		100					105					110			
Phe	Leu	Ile	Arg	Asp	Leu	Phe	Ser	Pro	Ser	Pro	Gly	Val	Gly	Arg	Gly
	115						120				125				
Leu	Arg	Ser	Thr	Pro	Lys	Pro	Ala	Pro	Ala	Pro	Gly	Pro	Asn	Phe	Arg
	130					135				140					
Phe	Phe	Arg	Ser	Phe	Phe	Arg	Gly	Gly	Trp	Glu	Arg	Ser	Pro	Trp	Glu
145				150					155					160	
Arg	Gly	Thr	Gly	Val	Arg	Ala	Ala	Gly	Gly	Arg	Glu	Val	Cys	Val	Arg
			165					170					175		
Asp	Val	Gly	Asp	Lys	Gly	Asp	Ala	Thr	Leu	Gly	Pro	Ser	Arg	Ser	Lys
		180					185					190			
Arg	Glu	Ser	Leu	Ser	Phe	Ile	Phe	Ser	Ser	Lys	Val	Ala	Leu	Ser	Gly

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 210 215 220
 Pro Ala
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<210> 5241
 <211> 461
 <212> DNA
 <213> Homo sapiens

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 120
 cccagggctg atccggagcc ctcttcaccc ccgtccaggg ccgtttgcac tgctcccgcc
 180
 atcggcacac cttgttctgg ttgtgctggg acggcagcgc cccgtgaggt cagaggggtg
 240
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 300
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 360
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 420
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 461

<210> 5242
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 5242
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 Cys Arg Gly Cys Thr His Phe Gln Gly Met Thr Ala Gly Pro His Ser
 20 25 30
 Glu Pro Gln Ala Asp Pro Glu Pro Ser Ser Ser Pro Ser Arg Ala Val
 35 40 45
 Cys Thr Ala Pro Gly Ile Gly Thr Pro Cys Ser Gly Cys Ala Gly Thr
 50 55 60
 Ala Ala Pro Arg Glu Val Arg Gly Leu Leu Ser His Leu Pro Pro Ser
 65 70 75 80
 Val Val Ser Trp Arg Phe Gln Trp Phe Gly Ala Ser Leu Leu Thr Trp
 85 90 95
 Pro Ala Leu Ser Ser Ala Ser Arg Leu Trp Gly Pro Leu His Pro Gly
 100 105 110
 Gly Arg Arg Arg Arg Lys Lys Pro Pro Glu Val Ala Arg Asn Pro Val
 115 120 125
 Ala Gly Glu Val Gly Leu Ser Gln Ala Arg Pro Leu Cys Arg Glu Phe
 130 135 140
 Pro Arg

145

<210> 5243

<211> 344

<212> DNA

<213> Homo sapiens

<400> 5243

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120
aattgcagtg aagaaagtgc taggttgtct ttgaagcttg gtgatgctgg aaaccccaga
180
agtcttgcta taagattcat ccttaccaat tacaacaagt tgtccatcca gagttggttt
240
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300
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344

<210> 5244

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5244

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Lys	Asn	Gln	Thr	Trp	Leu	Asp	Leu	Thr	Asp	Glu	Pro	Phe	Gly	Gln	Lys
			20					25					30		
Val	Thr	Val	Asp	Pro	Asp	Asn	Ser	Asn	Cys	Ser	Glu	Glu	Ser	Ala	Arg
		35					40					45			
Leu	Ser	Leu	Lys	Leu	Gly	Asp	Ala	Gly	Asn	Pro	Arg	Ser	Leu	Ala	Ile
	50					55				60					
Arg	Phe	Ile	Leu	Thr	Asn	Tyr	Asn	Lys	Leu	Ser	Ile	Gln	Ser	Trp	Phe
65					70				75					80	
Ser	Leu	Arg	Arg	Val	Glu	Ile	Ile	Ser	Asn	Asn	Ser	Ile	Gln	Ala	Val
			85					90					95		
Phe	Asn	Pro	Thr	Gly	Val	Tyr	Ala	Pro	Ser	Gly	Tyr	Ser	Tyr	Arg	Cys
			100					105					110		
Gln	Arg														

<210> 5245

<211> 483

<212> DNA

<213> Homo sapiens

<400> 5245

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ctccggccgg ctaagcccgcg gcggacaact atgctgaaag ccaagatcct cttcgtgggg
120

ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact
 180
 gaatacagcc caaccaagg agtgagggtt gagtcctgct ggccggccct gatgaaggat
 240
 gctcatggag tggatgacgt cttcaatgct gacatcccaa gccaccggaa ggaaatggag
 300
 atgtggtatt cctgctttgt ccaacagccg tccttacagg acacacagtg tatgctaatt
 360
 gcacaccaca aaccaggctc tggagatgat aaaggaagcc tgtctttgtc gccacccttg
 420
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 480
 ttc
 483

<210> 5246

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5246

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Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
		20						25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met
		35					40					45			
Lys	Asp	Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser
	50					55				60					
His	Arg	Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro
	65				70				75					80	
Ser	Leu	Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly
		85						90						95	
Ser	Gly	Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys
		100					105						110		
Leu	Lys	Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg
		115					120					125			
Met	Glu	Phe													
		130													

<210> 5247

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 5247

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 120
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 180
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 240

aacaacaaag gcacgggctg tgaattcgag ctatgggact gtggtggcga tgctaagttt
300
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360
gacatcccaa gccaccgga ggaaatggag atgtggtatt cctgctttgt ccaacagccg
420
tccttacagg acacacagt tatgctaatt gcacaccaca aaccaggctc tggagatgat
480
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540
gaagatgacc ctgaggagat ccgatggaa ttcataaagt atttaaaaag cataatcaac
600
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660
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780
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900
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<210> 5248

<211> 185

<212> PRT

<213> Homo sapiens

<400> 5248

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			20					25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Ile	Leu	Glu	Phe	Glu	Asn	Pro	His	Val
		35				40						45			
Thr	Ser	Asn	Asn	Lys	Gly	Thr	Gly	Cys	Glu	Phe	Glu	Leu	Trp	Asp	Cys
	50				55						60				
Gly	Gly	Asp	Ala	Lys	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met	Lys	Asp
65					70				75					80	
Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser	His	Arg
			85					90						95	
Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro	Ser	Leu
		100					105						110		
Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly	Ser	Gly
	115					120						125			
Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys	Leu	Lys
	130					135					140				
Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg	Met	Glu
145				150					155					160	
Phe	Ile	Lys	Tyr	Leu	Lys	Ser	Ile	Ile	Asn	Ser	Met	Ser	Glu	Ser	Arg

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 180 185
 <210> 5249
 <211> 653
 <212> DNA
 <213> Homo sapiens
 <400> 5249
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 180
 gagaaagtgg ccaatgtgat tgtggacat tctctgcagg actgtgtgtt cagcaaggaa
 240
 gcaggacgca tgtgctacgc catcattcag gcagagagta aacaagcagg ccagagtgtc
 300
 ttccgacgtg gactcctcaa ccggctgcag caggagtacc aggcctcgga gcagctgcga
 360
 gcacgtccc tgcagggctg ggtctgctat gtcaccttta tctgcaacat ctttgactac
 420
 ctgaggggtga acaacatgcc catgatggcc ctggatgaacc ctgtctatga ctgcctcttc
 480
 cggtggcccc agccagacag tttgagcaag gaggaggagg tggactgttt ggtgctgcag
 540
 ctgcaccggg ttggggagca gctggagaaa atgaatgggc agcgcacatga tgagctcttt
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 653

<210> 5250
 <211> 217
 <212> PRT
 <213> Homo sapiens

<400> 5250
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 20 25 30
 Glu Glu Tyr Lys Ile Gln Ser Phe Asp Ala Glu Thr Gln Gln Leu Leu
 35 40 45
 Lys Thr Ala Leu Lys Asp Pro Gly Ala Val Asp Leu Glu Lys Val Ala
 50 55 60
 Asn Val Ile Val Asp His Ser Leu Gln Asp Cys Val Phe Ser Lys Glu
 65 70 75 80
 Ala Gly Arg Met Cys Tyr Ala Ile Ile Gln Ala Glu Ser Lys Gln Ala
 85 90 95
 Gly Gln Ser Val Phe Arg Arg Gly Leu Leu Asn Arg Leu Gln Gln Glu
 100 105 110
 Tyr Gln Ala Arg Glu Gln Leu Arg Ala Arg Ser Leu Gln Gly Trp Val

115 120 125
 Cys Tyr Val Thr Phe Ile Cys Asn Ile Phe Asp Tyr Leu Arg Val Asn
 130 135 140
 Asn Met Pro Met Met Ala Leu Val Asn Pro Val Tyr Asp Cys Leu Phe
 145 150 155 160
 Arg Leu Ala Gln Pro Asp Ser Leu Ser Lys Glu Glu Glu Val Asp Cys
 165 170 175
 Leu Val Leu Gln Leu His Arg Val Gly Glu Gln Leu Glu Lys Met Asn
 180 185 190
 Gly Gln Arg Met Asp Glu Leu Phe Val Leu Ile Arg Asp Gly Phe Leu
 195 200 205
 Leu Pro Thr Gly Leu Ser Ser Leu Ala
 210 215

<210> 5251
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 5251
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 ccggaagacg gctttcctgc tttctgcagc agaagcttgg gagaagaagg ggcttttgaa
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 240
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 360
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 372

<210> 5252
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 5252
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 Asn Gly Tyr Ala His Pro Ser Gly Thr Ala Leu His Tyr Asp Asp Val
 20 25 30
 Pro Cys Ile Asn Gly Ser Gly Glu Pro Glu Asp Gly Phe Pro Ala Phe
 35 40 45
 Cys Ser Arg Ser Leu Gly Glu Glu Gly Ala Phe Glu Asn Pro Gly Leu
 50 55 60
 Tyr Asp Asn Trp Pro Pro His Ile Phe Ala Arg Tyr Ser Pro Ala
 65 70 75 80
 Asp Arg Lys Ala Ser Arg Leu Ser Ala Asp Lys Leu Ser Ser Asn His
 85 90 95
 Tyr Lys Tyr Pro Ala Ser Ala Gln Ser Val Thr Asn Thr Ser Ser Val

100 105 110
 Gly Arg Ala Ser Leu Gly Leu Asn Ser Gln Pro Gln
 115 120

<210> 5253
 <211> 898
 <212> DNA
 <213> Homo sapiens

<400> 5253
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 ccacagtga tttccagtcc agcaaattgga aatctgggga gtctatactt tgctcacaac
 120
 tcattctaat gccatccttg tggagagcca cagtgtagt caaggttcca tccaattcac
 180
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 240
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 300
 cttccgaaag atgtgtctcc agacccttca agcagctgac acacaagagt tcaggaccaa
 360
 actgcacaaa gtatttcgtg agatcaccca acaccaattt cttcaccact gctcatgtga
 420
 ggtgaagcag cagctaacc tagaaaaaaa ggactcagcc cagggcactg aggacgcacc
 480
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 cccgtcagag gccgccccgc gccgccccga agccaccgcg gccccctca ctctagagg
 660
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 720
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 780
 cagccctggg ccctgagccg ggccccctc cgcaagcgc caccgatccg gaggtgcgg
 840
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 898

<210> 5254
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 5254
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 Glu Ala Gln Glu Gly Gln Pro Pro His Arg Gly Asp Ala Ser Ser Ala
 20 25 30
 Leu Cys Gln Gly Pro Glu Pro Val Arg Gly Arg Pro Ala Pro Pro Gly
 35 40 45
 Ser His Arg Gly Pro Pro His Ser

50

55

<210> 5255

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 5255

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120
tgtcaacaaa cctcaccact ggatcctgac aaccacaatg cctggatcct ggggccccca
180
tcactggatc ccagatcccc tcactccacc cactggatcc ctgcattggg ttttggtttt
240
ttgttttttt ttaacctcga cactgggtct cagatccttc tgctgactgc cagatccctg
300
catttcaagc actacgcctt ccacccccag gcactggatc ccagattccc aagccttcac
360
ccaccagatt ctggctccta aaacaagtgc gggggccccca gtggcacagc aagtggatcc
420
tggcaactgc agctgctgga ttccagattc tgggtcccca atccctctgc ccagtcctc
480
aatgttgaaa cctcatctct tgaaggcaga tctgatatt ccaaggcact gaatcccaag
540
ccctgaatcc cgggtttctg atctgaatct tccaggcgcc ggggtccaaa tggtcaggcc
600
ccaagtctag atcctggcag cccagtcaca gagtatccca cacacactgg tgcccagagc
660
cggcttctca tgacatgaaa ttgcatggtc gagggagtct gtggggaagg aagcccaggt
720
cctggctgca acctgcacgg atgctggatt cccctcacc ccacctctgc atggccacc
780
cctcccagcc ctgtggggaa actgttcctt ggaaccactc cactccctgc atccccacac
840
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900
ctccaagggg tccgaggaat cactcactcc tggaggctgg caaggagaca gtctgaggcc
960
agggacacat gaagggatgt cccaccccca gcactatcag ggcctcccca ggcttcaga
1020
gttgaaagcc aggagaaaat cggcaaagac cacccttccc taaacccaag caccatga
1080
tgcaaaaaac aaaaacaaaa aaaaccacca aatcccaaaa ttcattccag atctattttt
1140
ctaccagaga gaggagcaaa gtccctctcc cctgcgccct tacattctgc acttcatagt
1200
tggattctga gcttaggatc atctggagac cccatggagg gacttgaaa ggggaactgg
1260
gatttgggga ggggctggag gacttcgca cgcttcacc tccttcgacc tccactgcgc
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1380

aagctcttta aaaaaaaaaa aaaaaaaaaa

1410

<210> 5256

<211> 95

<212> PRT

<213> Homo sapiens

<400> 5256

Met	Val	Glu	Gly	Val	Cys	Gly	Glu	Gly	Ser	Pro	Gly	Pro	Gly	Cys	Asn
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Leu	His	Gly	Cys	Trp	Ile	Pro	Pro	His	Pro	Thr	Ser	Ala	Trp	Pro	Pro
		20						25					30		
Pro	Pro	Ser	Pro	Val	Gly	Lys	Leu	Phe	Pro	Gly	Thr	Thr	Pro	Leu	Pro
		35					40					45			
Ala	Ser	Pro	His	Phe	Thr	Ala	Ser	Ser	Ile	Pro	Leu	Pro	Pro	Ser	Arg
	50					55					60				
Arg	Ile	Val	Pro	Arg	Ala	Val	Phe	Leu	Gln	Gly	Val	Arg	Gly	Ile	Thr
65				70					75					80	
His	Ser	Trp	Arg	Leu	Ala	Arg	Arg	Gln	Ser	Glu	Ala	Arg	Asp	Thr	
			85						90					95	

<210> 5257

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 5257

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120
tcctctact ccgcateccg cgagcctgcc cgggtccgcg gccttgctta tgggcaccac
180
gggatccag ccaaggctgt cgaactcaag aacctggagc tagctgctgt gagaggatca
240
gatgtccgtg tgaagatgct ggccggccct atcaatccat ctgacataaa tatgatccaa
300
ggaaactacg gactccttcc tgaactgcct gctgttgagg ggaacgaagg tgttgacag
360
gtggtagcgg tgggcagcaa tgtgaccggg ctgaagccag gagactgggt gattccagca
420
aatgctggtt tagactcagg aacctggcgg accgaggctg tgttcagcga ggaagcactg
480
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540
acagcctaca ggatgttgat ggacttcgag caactgcagc caggggattc tgtcatccag
600
aatgcatcca acagcggagt ggggcaagca gtcacccaga tcgccgcagc cctgggccta
660
agaacatca atgtgttcg agacagacct gatatccaga agctgagtga cagactgaag
720
agtctggggg ctgagcatgt catcacagaa gaggagctaa gaaggccga aatgaaaaac
780

ttctttaagg acatgccccca gccacggctt gctctcaact gtgttggtgg gaaaagctcc
 840
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 900
 aagcagcccg tctagcctc tgtgagcctg ctcatTTTTa aggatctcaa acttcgaggg
 960
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 1080
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 1140
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 1260
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 1366

<210> 5258

<211> 375

<212> PRT

<213> Homo sapiens

<400> 5258

Met	Trp	Val	Cys	Ser	Thr	Leu	Trp	Arg	Val	Arg	Thr	Pro	Pro	Gly	Ser
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Gly	Gly	Gly	Leu	Leu	Pro	Ala	Ser	Gly	Cys	His	Gly	Pro	Ala	Ala	Ser
			20					25					30		
Ser	Tyr	Ser	Ala	Ser	Ala	Glu	Pro	Ala	Arg	Val	Arg	Gly	Leu	Val	Tyr
	35						40					45			
Gly	His	His	Gly	Asp	Pro	Ala	Lys	Val	Val	Glu	Leu	Lys	Asn	Leu	Glu
	50					55					60				
Leu	Ala	Ala	Val	Arg	Gly	Ser	Asp	Val	Arg	Val	Lys	Met	Leu	Ala	Ala
65					70					75				80	
Pro	Ile	Asn	Pro	Ser	Asp	Ile	Asn	Met	Ile	Gln	Gly	Asn	Tyr	Gly	Leu
			85					90					95		
Leu	Pro	Glu	Leu	Pro	Ala	Val	Gly	Gly	Asn	Glu	Gly	Val	Ala	Gln	Val
		100						105					110		
Val	Ala	Val	Gly	Ser	Asn	Val	Thr	Gly	Leu	Lys	Pro	Gly	Asp	Trp	Val
		115					120					125			
Ile	Pro	Ala	Asn	Ala	Gly	Leu	Asp	Ser	Gly	Thr	Trp	Arg	Thr	Glu	Ala
	130					135					140				
Val	Phe	Ser	Glu	Glu	Ala	Leu	Ile	Gln	Val	Pro	Ser	Asp	Ile	Pro	Leu
145					150					155				160	
Gln	Ser	Ala	Ala	Thr	Leu	Gly	Val	Asn	Pro	Cys	Thr	Ala	Tyr	Arg	Met
			165					170					175		
Leu	Met	Asp	Phe	Glu	Gln	Leu	Gln	Pro	Gly	Asp	Ser	Val	Ile	Gln	Asn
		180						185					190		
Ala	Ser	Asn	Ser	Gly	Val	Gly	Gln	Ala	Val	Ile	Gln	Ile	Ala	Ala	Ala
		195					200					205			
Leu	Gly	Leu	Arg	Thr	Ile	Asn	Val	Val	Arg	Asp	Arg	Pro	Asp	Ile	Gln

210	215	220
Lys Leu Ser Asp Arg	Leu Lys Ser Leu Gly Ala	Glu His Val Ile Thr
225	230	235
Glu Glu Glu Leu Arg	Arg Pro Glu Met Lys Asn Phe Phe	Lys Asp Met
245	250	255
Pro Gln Pro Arg Leu Ala	Leu Asn Cys Val Gly Gly Lys Ser	Ser Thr
260	265	270
Glu Leu Leu Arg Gln Leu Ala	Arg Gly Gly Thr Met Val Thr Tyr Gly	
275	280	285
Gly Met Ala Lys Gln Pro Val	Val Ala Ser Val Ser Leu Leu Ile Phe	
290	295	300
Lys Asp Leu Lys Leu Arg Gly	Phe Trp Leu Ser Gln Trp Lys Lys Asp	
305	310	315
His Ser Pro Asp Gln Phe Lys	Glu Leu Ile Leu Thr Leu Cys Asp Leu	
325	330	335
Ile Arg Arg Gly Gln Leu Thr	Ala Pro Ala Cys Ser Gln Val Pro Leu	
340	345	350
Gln Asp Tyr Gln Ser Ala Leu	Glu Ala Ser Met Lys Pro Phe Ile Ser	
355	360	365
Ser Lys Gln Ile Leu Thr Met		
370	375	

<210> 5259

<211> 306

<212> DNA

<213> Homo sapiens

<400> 5259

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actgaagaga agacgtgac tgctgagggt ttggtaaaac tcctccaggc tgtgaagacg
120

actttcccaa acctgggcct tctgctagag aagtgcaga aatcagccac ttgccaagc
180

accacagtcc aaccaagccc tgatgattat gggactgagc tattgagacg ctatcatgaa
240

aacctctctg agattttcac agacaaccag attttattaa agatgatctc acacatgaca
300

agttta

306

<210> 5260

<211> 83

<212> PRT

<213> Homo sapiens

<400> 5260

Met Thr Glu Glu Lys Thr Leu Thr Ala Glu Gly Leu Val Lys Leu Leu
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Gln Ala Val Lys Thr Thr Phe Pro Asn Leu Gly Leu Leu Leu Glu Lys
20 25 30

Leu Gln Lys Ser Ala Thr Leu Pro Ser Thr Thr Val Gln Pro Ser Pro
35 40 45

Asp Asp Tyr Gly Thr Glu Leu Leu Arg Arg Tyr His Glu Asn Leu Ser

50	55	60
Glu Ile Phe Thr Asp Asn Gln Ile Leu Leu Lys Met Ile Ser His Met		
65	70	75
Thr Ser Leu		80

<210> 5261

<211> 2394

<212> DNA

<213> Homo sapiens

<400> 5261

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atctgtttcc agggagacga gggcgccctgc ccgacccggg acttcgtggt aggagcgctt

180

atcctgcgct ccacggcat ggacccgagc gacatctacg cggtcacca gatcccgggc

240

agccgcgaat tcgacgtgag cttccgctca gcgagaaagc tggccctgtt cctacgcgtc

300

tacgaggaga agcgggagca ggaggactgc tgggagaact ttgtggtgct ggggcggagc

360

aagtccagct tgaagacgct cttcactctc ttccggaacg agacggtgga cgtggaggac

420

attgtgactt ggctcaagcg ccaactgcgac gtgctggccg tgccggtgaa agtgaccgac

480

aggtttggga tctggaccgg ggagtacaaa tgcgagatcg agctgcgcca gggggagggc

540

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600

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660

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720

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780

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840

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900

cattttttat cgtttttgaa ggagatcttt ttaaaccta caagagacat ctctctatgc

960

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1020

aacgactgcg gagaactgta gcgtgcagat gtgttgccc tcccttttaa aattttattt

1080

tcgtttttct attgggtatt tgttttgttt cttgtacttt ttctctctct ccttgcccc

1140

ctcccgccct ccccgcccca taccttttct tccctggat tttaccctt tgggtgcct

1200

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1260

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 1680
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 1980
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 2100
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 2160
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 2394

<210> 5262

<211> 275

<212> PRT

<213> Homo sapiens

<400> 5262

Xaa	Ala	Ala	Met	Ala	Thr	Pro	Ala	Arg	Pro	Gly	Glu	Ala	Glu	Asp	Ala
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Ala	Glu	Arg	Pro	Leu	Gln	Asp	Glu	Pro	Ala	Ala	Ala	Ala	Gly	Pro	
			20					25				30			
Gly	Lys	Gly	Arg	Phe	Leu	Val	Arg	Ile	Cys	Phe	Gln	Gly	Asp	Glu	Gly
		35					40				45				
Ala	Cys	Pro	Thr	Arg	Asp	Phe	Val	Val	Gly	Ala	Leu	Ile	Leu	Arg	Ser
	50					55					60				

Ile Gly Met Asp Pro Ser Asp Ile Tyr Ala Val Ile Gln Ile Pro Gly
 70 75 80
 Ser Arg Glu Phe Asp Val Ser Phe Arg Ser Ala Glu Lys Leu Ala Leu
 85 90 95
 Phe Leu Arg Val Tyr Glu Glu Lys Arg Glu Gln Glu Asp Cys Trp Glu
 100 105 110
 Asn Phe Val Val Leu Gly Arg Ser Lys Ser Ser Leu Lys Thr Leu Phe
 115 120 125
 Ile Leu Phe Arg Asn Glu Thr Val Asp Val Glu Asp Ile Val Thr Trp
 130 135 140
 Leu Lys Arg His Cys Asp Val Leu Ala Val Pro Val Lys Val Thr Asp
 145 150 155 160
 Arg Phe Gly Ile Trp Thr Gly Glu Tyr Lys Cys Glu Ile Glu Leu Arg
 165 170 175
 Gln Gly Glu Gly Gly Val Arg His Leu Pro Gly Ala Phe Phe Leu Gly
 180 185 190
 Ala Glu Arg Gly Tyr Ser Trp Tyr Lys Gly Gln Pro Lys Thr Cys Phe
 195 200 205
 Lys Cys Gly Ser Arg Thr His Met Ser Gly Ser Cys Thr Gln Asp Arg
 210 215 220
 Cys Phe Arg Cys Gly Glu Glu Gly His Leu Ser Pro Tyr Cys Arg Lys
 225 230 235 240
 Gly Ile Val Cys Asn Leu Cys Gly Lys Arg Gly His Ala Phe Ala Gln
 245 250 255
 Cys Pro Lys Ala Val His Asn Ser Val Ala Ala Gln Leu Thr Gly Val
 260 265 270
 Ala Gly His
 275

<210> 5263

<211> 319

<212> DNA

<213> Homo sapiens

<400> 5263

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120

gaagtagata cacattatct tctgacaggg gggaagtatc agaagaaagc atgttggttg

180

tgccttgga aatctttttt gggtgatatt gaaatgccat ttcaccagtt tcaagccttc

240

ttcccaagag tgacttatct gtatcttact ttgtagcttc cattcagaca ttgttgctct

300

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319

<210> 5264

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5264

Met Asp Leu Ile Asn Arg Ala Thr Met Ser Glu Trp Lys Leu Gln Ser
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 Lys Ile Gln Ile Ser His Ser Trp Glu Glu Gly Leu Lys Leu Val Lys
 20 25 30
 Trp His Phe Asn Ile Asn Gln Lys Arg Phe Ser Lys Ala Gln Pro Thr
 35 40 45
 Cys Phe Leu Leu Ile Leu Pro Pro Cys Gln Lys Ile Met Cys Ile Tyr
 50 55 60
 Phe Gln Leu Leu Leu Met Glu Thr Thr Ala Met Leu Asp Leu Leu Val
 65 70 75 80
 Ile Arg Gln Leu Lys Ser Ala Leu Ser Gln Thr Leu Leu Cys His Leu
 85 90 95
 Leu Ile Leu Val Leu Ile Cys Ser Arg
 100 105

<210> 5265

<211> 3203

<212> DNA

<213> Homo sapiens

<400> 5265

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<210> 5266

<211> 853

<212> PRT

<213> Homo sapiens

<400> 5266

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 Glu Glu Ile Leu Pro Glu Pro Gly Ser Glu Thr Pro Thr Val Ala Ser
 35 40 45
 Glu Ala Leu Ala Glu Leu Leu His Gly Ala Leu Leu Arg Arg Gly Pro
 50 55 60
 Glu Met Gly Tyr Leu Pro Gly Pro Pro Leu Gly Pro Glu Gly Gly Glu
 65 70 75 80
 Glu Glu Thr Thr Thr Thr Ile Ile Thr Thr Thr Thr Val Thr Thr Thr
 85 90 95
 Val Thr Ser Pro Val Leu Cys Asn Asn Asn Ile Ser Glu Gly Glu Gly
 100 105 110
 Tyr Val Glu Ser Pro Asp Leu Gly Ser Pro Val Ser Arg Thr Leu Gly
 115 120 125
 Leu Leu Asp Cys Thr Tyr Ser Ile His Val Tyr Pro Gly Tyr Gly Ile
 130 135 140
 Glu Ile Gln Val Gln Thr Leu Asn Leu Ser Gln Glu Glu Glu Leu Leu
 145 150 155 160
 Val Leu Ala Gly Gly Gly Ser Pro Gly Leu Ala Pro Arg Leu Leu Ala
 165 170 175
 Asn Ser Ser Met Leu Gly Glu Gly Gln Val Leu Arg Ser Pro Thr Asn
 180 185 190
 Arg Leu Leu Leu His Phe Gln Ser Pro Arg Val Pro Arg Gly Gly Gly

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Phe Arg Ile His Tyr Gln Ala Tyr Leu Leu Ser Cys Gly Phe Pro Pro		
210	215	220
Arg Pro Ala His Gly Asp Val Ser Val Thr Asp Leu His Pro Gly Gly		
225	230	235
Thr Ala Thr Phe His Cys Asp Ser Gly Tyr Gln Leu Gln Gly Glu Glu		
245	250	255
Thr Leu Ile Cys Leu Asn Gly Thr Arg Pro Ser Trp Asn Gly Glu Thr		
260	265	270
Pro Ser Cys Met Ala Ser Cys Gly Gly Thr Ile His Asn Ala Thr Leu		
275	280	285
Gly Arg Ile Val Ser Pro Glu Pro Gly Gly Ala Val Gly Pro Asn Leu		
290	295	300
Thr Cys Arg Trp Val Ile Glu Ala Ala Glu Gly Arg Arg Leu His Leu		
305	310	315
His Phe Glu Arg Val Ser Leu Asp Glu Asp Asn Asp Arg Leu Met Val		
325	330	335
Arg Ser Gly Gly Ser Pro Leu Ser Pro Val Ile Tyr Asp Ser Asp Met		
340	345	350
Asp Asp Val Pro Glu Arg Gly Leu Ile Ser Asp Ala Gln Ser Leu Tyr		
355	360	365
Val Glu Leu Leu Ser Glu Thr Pro Ala Asn Pro Leu Leu Leu Ser Leu		
370	375	380
Arg Phe Glu Ala Phe Glu Glu Asp Arg Cys Phe Ala Pro Phe Leu Ala		
385	390	395
His Gly Asn Val Thr Thr Thr Asp Pro Glu Tyr Arg Pro Gly Ala Leu		
405	410	415
Ala Thr Phe Ser Cys Leu Pro Gly Tyr Ala Leu Glu Pro Pro Gly Pro		
420	425	430
Pro Asn Ala Ile Glu Cys Val Asp Pro Thr Glu Pro His Trp Asn Asp		
435	440	445
Thr Glu Pro Ala Cys Lys Ala Met Cys Gly Gly Glu Leu Ser Glu Pro		
450	455	460
Ala Gly Val Val Leu Ser Pro Asp Trp Pro Gln Ser Tyr Ser Pro Gly		
465	470	475
Gln Asp Cys Val Trp Gly Val His Val Gln Glu Glu Lys Arg Ile Leu		
485	490	495
Leu Gln Val Glu Ile Leu Asn Val Arg Glu Gly Asp Met Leu Thr Leu		
500	505	510
Phe Asp Gly Asp Gly Pro Ser Ala Arg Val Leu Ala Gln Leu Arg Gly		
515	520	525
Pro Gln Pro Arg Arg Arg Leu Leu Ser Ser Gly Pro Asp Leu Thr Leu		
530	535	540
Gln Phe Gln Ala Pro Pro Gly Pro Pro Asn Pro Gly Leu Gly Gln Gly		
545	550	555
Phe Val Leu His Phe Lys Glu Val Pro Arg Asn Asp Thr Cys Pro Glu		
565	570	575
Leu Pro Pro Pro Glu Trp Gly Trp Arg Thr Ala Ser His Gly Asp Leu		
580	585	590
Ile Arg Gly Thr Val Leu Thr Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		
595	600	605
Leu Gly Ser Asp Ile Leu Thr Cys Gln Trp Asp Leu Ser Trp Ser Ala		
610	615	620
Ala Pro Pro Ala Cys Gln Lys Ile Met Thr Cys Ala Asp Pro Gly Glu		

625 630 635 640
 Ile Ala Asn Gly His Arg Thr Ala Ser Asp Ala Gly Phe Pro Val Gly
 645 650 655
 Ser His Val Gln Tyr Arg Cys Leu Pro Gly Tyr Ser Leu Glu Gly Ala
 660 665 670
 Ala Met Leu Thr Cys Tyr Ser Arg Asp Thr Gly Thr Pro Lys Trp Ser
 675 680 685
 Asp Arg Val Pro Lys Cys Ala Leu Lys Tyr Glu Pro Cys Leu Asn Pro
 690 695 700
 Gly Val Pro Glu Asn Gly Tyr Gln Thr Leu Tyr Lys His His Tyr Gln
 705 710 715 720
 Ala Gly Glu Ser Leu Arg Phe Phe Cys Tyr Glu Gly Phe Glu Leu Ile
 725 730 735
 Gly Glu Val Thr Ile Thr Cys Val Pro Gly His Pro Ser Gln Trp Thr
 740 745 750
 Ser Gln Pro Pro Leu Cys Lys Val Ala Tyr Glu Glu Leu Leu Asp Asn
 755 760 765
 Arg Lys Leu Glu Val Thr Gln Thr Thr Asp Pro Ser Arg Gln Leu Glu
 770 775 780
 Gly Gly Asn Leu Ala Leu Ala Ile Leu Leu Pro Leu Gly Leu Val Ile
 785 790 795 800
 Val Leu Gly Ser Gly Val Tyr Ile Tyr Tyr Thr Lys Leu Gln Gly Lys
 805 810 815
 Ser Leu Phe Gly Phe Ser Gly Ser His Ser Tyr Ser Pro Ile Thr Val
 820 825 830
 Glu Ser Asp Phe Ser Asn Pro Leu Tyr Glu Ala Gly Asp Thr Arg Glu
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 Tyr Glu Val Ser Ile
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<210> 5267

<211> 885

<212> DNA

<213> Homo sapiens

<400> 5267

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 540

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<210> 5268

<211> 279

<212> PRT

<213> Homo sapiens

<400> 5268

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		20						25					30		
Tyr	Ala	Pro	Gln	Thr	Tyr	Ala	Ala	Ile	Pro	Ser	Leu	His	Phe	Pro	Ala
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Thr	Lys	Gly	His	Leu	Ser	Asn	Arg	Ala	Ile	Ile	Arg	Ala	Pro	Ser	Val
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Arg	Glu	Ile	Tyr	Met	Asn	Val	Pro	Val	Gly	Ala	Ala	Gly	Val	Arg	Gly
65					70					75				80	
Leu	Gly	Gly	Arg	Gly	Tyr	Leu	Ala	Tyr	Thr	Gly	Leu	Gly	Arg	Gly	Tyr
			85						90					95	
Gln	Val	Lys	Gly	Asp	Lys	Arg	Glu	Asp	Lys	Leu	Tyr	Asp	Ile	Leu	Pro
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Gly	Met	Glu	Leu	Thr	Pro	Met	Asn	Pro	Val	Thr	Leu	Lys	Pro	Gln	Gly
		115					120					125			
Ile	Lys	Leu	Ala	Pro	Gln	Ile	Leu	Glu	Glu	Ile	Cys	Gln	Lys	Asn	Asn
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Arg	Gln	Leu	Phe	Leu	Tyr	Lys	Ile	Thr	Ile	Pro	Ala	Leu	Ala	Ser	Gln
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Asn	Pro	Ala	Ile	His	Pro	Phe	Thr	Pro	Pro	Lys	Leu	Ser	Ala	Phe	Val
		180						185					190		
Asp	Glu	Ala	Lys	Thr	Tyr	Ala	Ala	Glu	Tyr	Thr	Leu	Gln	Thr	Leu	Gly
	195						200					205			
Ile	Pro	Thr	Asp	Gly	Gly	Asp	Gly	Thr	Met	Ala	Thr	Ala	Ala	Ala	Ala
	210					215					220				
Ala	Thr	Ala	Phe	Pro	Gly	Tyr	Ala	Val	Pro	Asn	Ala	Thr	Ala	Pro	Val
225					230					235				240	
Ser	Ala	Ala	Gln	Leu	Lys	Gln	Ala	Val	Thr	Leu	Gly	Gln	Asp	Leu	Ala
			245						250					255	
Ala	Tyr	Thr	Thr	Tyr	Glu	Val	Tyr	Pro	Thr	Phe	Ala	Val	Thr	Ala	Arg
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<210> 5269
<211> 1177
<212> DNA
<213> Homo sapiens

<400> 5269
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<210> 5270
<211> 327
<212> PRT
<213> Homo sapiens

<400> 5270

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Gln Pro Ile Ser Glu Glu Glu Ala Ile Gln Ile Ile Ala Asp Pro Pro
 35          40          45
Leu Pro Pro Ala Ser Phe Thr Leu Arg Asp Tyr Val Asp His Ser Glu
 50          55          60
Thr Leu Gln Lys Leu Val Leu Leu Gly Val Asp Leu Ser Lys Ile Glu
 65          70          75          80
Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu Lys
 85          90          95
Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu Asp
100          105          110
Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser Glu
115          120          125
Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys Asn
130          135          140
Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe Leu
145          150          155          160
Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe Gln
165          170          175
Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val Arg
180          185          190
Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn Met
195          200          205
Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln His
210          215          220
Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys Leu
225          230          235          240
Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His His
245          250          255
Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys Val
260          265          270
Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr Asp
275          280          285
Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile Pro
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<210> 5271

<211> 1185

<212> DNA

<213> Homo sapiens

<400> 5271

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120

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<210> 5272

<211> 385

<212> PRT

<213> Homo sapiens

<400> 5272

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Glu	Cys	Gly	Asn	Val	Thr	Gly	Ala	Ser	Ser	Pro	Ser	Arg	Thr	Pro	Phe
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Gln	Asn	Pro	Ser	Leu	Leu	Leu	Val	His	Lys	Gln	Lys	Leu	Ala	Lys	Trp
		50				55					60				
Val	Ala	Ile	Gln	Ser	Val	Ser	Ala	Trp	Pro	Glu	Lys	Arg	Gly	Glu	Ile
65					70					75				80	
Arg	Arg	Met	Met	Glu	Val	Ala	Ala	Ala	Asp	Val	Lys	Gln	Leu	Gly	Gly

	85		90		95
Ser Val Glu Leu Val Asp Ile Gly Lys Gln Lys Leu Pro Asp Gly Ser					
	100		105		110
Glu Ile Pro Leu Pro Pro Ile Leu Leu Gly Arg Leu Gly Ser Asp Pro					
	115		120		125
Gln Lys Lys Thr Val Cys Ile Tyr Gly His Leu Asp Val Gln Pro Ala					
	130		135		140
Ala Leu Glu Asp Gly Trp Asp Ser Glu Pro Phe Thr Leu Val Glu Arg					
	145		150		155
Asp Gly Lys Leu Tyr Gly Arg Gly Ser Thr Asp Asp Lys Gly Pro Val					
	165		170		175
Ala Gly Trp Ile Asn Ala Leu Glu Ala Tyr Gln Lys Thr Gly Gln Glu					
	180		185		190
Ile Pro Val Asn Val Arg Phe Cys Leu Glu Gly Met Glu Glu Ser Gly					
	195		200		205
Ser Glu Gly Leu Asp Glu Leu Ile Phe Ala Arg Lys Asp Thr Phe Phe					
	210		215		220
Lys Asp Val Asp Tyr Val Cys Ile Ser Asp Asn Tyr Trp Leu Gly Lys					
	225		230		235
Lys Lys Pro Cys Ile Thr Tyr Gly Leu Arg Gly Ile Cys Tyr Phe Phe					
	245		250		255
Ile Glu Val Glu Cys Ser Asn Lys Asp Leu His Ser Gly Val Tyr Gly					
	260		265		270
Gly Ser Val His Glu Ala Met Thr Asp Leu Ile Leu Leu Met Gly Ser					
	275		280		285
Leu Val Asp Lys Arg Gly Asn Ile Leu Ile Pro Gly Ile Asn Glu Ala					
	290		295		300
Val Ala Ala Val Thr Glu Glu Glu His Lys Leu Tyr Asp Asp Ile Asp					
	305		310		315
Phe Asp Ile Glu Glu Phe Ala Lys Asp Val Gly Ala Gln Ile Leu Leu					
	325		330		335
His Ser His Lys Lys Asp Ile Leu Met His Arg Trp Arg Tyr Pro Ser					
	340		345		350
Leu Ser Leu His Gly Ile Glu Gly Ala Phe Ser Gly Ser Gly Ala Lys					
	355		360		365
Thr Val Ile Pro Lys Lys Val Val Gly Lys Phe Ser Ile Arg Leu Val					
	370		375		380
Pro					
385					

<210> 5273

<211> 4580

<212> DNA

<213> Homo sapiens

<400> 5273

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240

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2160
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2280
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<210> 5274

<211> 185

<212> PRT

<213> Homo sapiens

<400> 5274

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Ser	Asp	Gly	Ser	Gly	Cys	Tyr	Ser	Leu	Pro	Ser	Gln	Pro	Cys	Asn	Glu
			20					25					30		
Val	Thr	Pro	Arg	Ile	Tyr	Val	Gly	Asn	Ala	Ser	Val	Ala	Gln	Asp	Ile
		35					40					45			
Pro	Lys	Leu	Gln	Lys	Leu	Gly	Ile	Thr	His	Val	Leu	Asn	Ala	Ala	Glu
	50					55					60				
Gly	Arg	Ser	Phe	Met	His	Val	Asn	Thr	Asn	Ala	Asn	Phe	Tyr	Lys	Asp

65		70		75		80									
Ser	Gly	Ile	Thr	Tyr	Leu	Gly	Ile	Lys	Ala	Asn	Asp	Thr	Gln	Glu	Phe
				85				90					95		
Asn	Leu	Ser	Ala	Tyr	Phe	Glu	Arg	Ala	Ala	Asp	Phe	Ile	Asp	Gln	Ala
			100					105					110		
Leu	Ala	Gln	Lys	Asn	Gly	Arg	Val	Leu	Val	His	Cys	Arg	Glu	Gly	Tyr
		115					120					125			
Ser	Arg	Ser	Pro	Thr	Leu	Val	Ile	Ala	Tyr	Leu	Met	Met	Arg	Gln	Lys
	130					135					140				
Met	Asp	Val	Lys	Ser	Ala	Leu	Ser	Ile	Val	Arg	Gln	Asn	Arg	Glu	Ile
145					150					155				160	
Gly	Pro	Asn	Asp	Gly	Phe	Leu	Ala	Gln	Leu	Cys	Gln	Leu	Asn	Asp	Arg
			165					170					175		
Leu	Ala	Lys	Glu	Gly	Lys	Leu	Lys	Pro							
		180					185								

<210> 5275

<211> 810

<212> DNA

<213> Homo sapiens

<400> 5275

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120
atgtcctgca tctaacggcg tgtgaccccc gaagccgagc gagctccgga ggaatttcag
180
tatctgttac ggtaacttca tcagcccgcc aagatggcga tgcaagcggc caagagggcg
240
aacattcgac ttccacctga agtaaatcgg atattgtata taagaaattt gccatacaaa
300
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360
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420
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540
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600
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660
taatactaaa tattgtgatt tcttatttga ggttcaaaat gacctgcttg aaactttgat
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<210> 5276

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5276

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Val Asn Arg Ile Leu Tyr Ile Arg Asn Leu Pro Tyr Lys Ile Thr Ala
 20           25           30
Glu Glu Met Tyr Asp Ile Phe Gly Lys Tyr Gly Pro Ile Arg Gln Ile
 35           40           45
Arg Val Gly Asn Thr Pro Glu Thr Arg Gly Thr Ala Tyr Val Val Tyr
 50           55           60
Glu Asp Ile Phe Asp Ala Lys Asn Ala Cys Asp His Leu Ser Gly Phe
 65           70           75           80
Asn Val Cys Asn Arg Tyr Leu Val Val Leu Tyr Tyr Asn Ala Asn Arg
 85           90           95
Ala Phe Gln Lys Met Asp Thr Lys Lys Glu Glu Gln Leu Lys Leu
100           105           110
Leu Lys Glu Lys Tyr Gly Ile Asn Thr Asp Pro Pro Lys
115           120           125

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<210> 5277

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5277

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120
accctgtccc tgcccttcta catctcccag tgctggacct teggtccgt cctggcgctc
180
acctggaccg tctggcgctt cttctgcgg gacatcacat tgaggtacaa ggagaccg
240
tggcagaagt ggcagaacaa ggatgaccag ggcagcaccg tcggcaacgg ggaccagcac
300
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360
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420
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480
tgcttttctc ctgtgcacct ggcgaggctg aaggcgagg gtggaggagg cccagcaca
540
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600
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<210> 5278

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5278

Ile Tyr Asp Phe Met Asp Asp Pro Lys Pro His Lys Lys Leu Gly Pro
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 20 25 30
 Val Lys Tyr Asp Pro His Thr Leu Thr Leu Ser Leu Pro Phe Tyr Ile
 35 40 45
 Ser Gln Cys Trp Thr Leu Gly Ser Val Leu Ala Leu Thr Trp Thr Val
 50 55 60
 Trp Arg Phe Phe Leu Arg Asp Ile Thr Leu Arg Tyr Lys Glu Thr Arg
 65 70 75 80
 Trp Gln Lys Trp Gln Asn Lys Asp Asp Gln Gly Ser Thr Val Gly Asn
 85 90 95
 Gly Asp Gln His Pro Leu Gly Leu Asp Glu Asp Leu Leu Gly Pro Gly
 100 105 110
 Val Ala Glu Gly Glu Gly Ala Pro Thr Pro Asn
 115 120

<210> 5279

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 5279

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 120
 ctactcccta agctgattgc aggtggccac aaagtactca tcttctccca gatggtgcgc
 180
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 240
 gggcgagtac ggggaaacct gcgcaggct gccatcgacc gcttcagcaa gcctgactca
 300
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 420
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 660
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 720
 atccagtctg aggggaaagg gtccactttt gccaggcta gctttgtggc ttcaggaaac
 780
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 900

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<210> 5280

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5280

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Ser	Pro	Asp	Ala	Pro	Asp	Phe	Gln	Leu	Gln	Ala	Met	Ile	Gln	Ala	Ala
			20					25					30		
Gly	Lys	Leu	Val	Leu	Ile	Asp	Lys	Leu	Leu	Pro	Lys	Leu	Ile	Ala	Gly
		35					40					45			
Gly	His	Lys	Val	Leu	Ile	Phe	Ser	Gln	Met	Val	Arg	Cys	Leu	Asp	Ile
	50					55					60				
Leu	Glu	Asp	Tyr	Leu	Ile	Gln	Arg	Arg	Tyr	Thr	Tyr	Glu	Arg	Ile	Asp
65					70					75				80	
Gly	Arg	Val	Arg	Gly	Asn	Leu	Arg	Gln	Ala	Ala	Ile	Asp	Arg	Phe	Ser
				85				90						95	
Lys	Pro	Asp	Ser	Asp	Arg	Phe	Val	Phe	Leu	Leu	Cys	Thr	Arg	Ala	Gly
			100					105					110		
Gly	Leu	Gly	Ile	Asn	Leu	Thr	Ala	Ala	Asp	Thr	Cys	Ile	Ile	Phe	Asp
		115				120						125			
Ser	Asp	Trp	Asn	Pro	Gln	Asn	Asp	Leu	Gln	Ala	Gln	Ala	Arg	Cys	His
		130				135					140				
Arg	Ile	Gly	Gln	Ser	Lys	Ala	Val	Lys	Val	Tyr	Arg	Leu	Ile	Thr	Arg
145					150					155				160	
Asn	Ser	Tyr	Glu	Arg	Glu	Met	Phe	Asp	Lys	Ala	Ser	Leu	Lys	Leu	Gly
				165				170						175	
Leu	Asp	Lys	Ala	Val	Leu	Gln	Thr	Ser	Thr	Glu	Arg	Ala	Ala	Pro	Met
		180						185					190		
Gly	Thr	Ala	Leu	Ser	Lys	Met	Glu	Val	Glu	Asp	Leu	Leu	Arg	Lys	Gly
		195					200					205			
Ala	Tyr	Gly	Ala	Leu	Met	Asp	Glu	Glu	Asp	Glu	Gly	Ser	Lys	Phe	Cys
		210				215					220				
Glu	Glu	Asp	Ile	Asp	Gln	Ile	Leu	Gln	Arg	Arg	Thr	His	Thr	Ile	Thr
225					230					235				240	
Ile	Gln	Ser	Glu	Gly	Lys	Gly	Ser	Thr	Phe	Ala	Lys	Ala	Ser	Phe	Val
				245				250						255	
Ala	Ser	Gly	Asn	Arg	Thr	Asp	Ile	Ser	Leu	Asp	Asp	Pro	Asn	Phe	Trp
			260					265					270		
Gln	Lys	Trp	Ala	Lys	Ile	Ala	Glu	Leu	Asp	Thr	Glu	Ala	Lys	Asn	Glu


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Lys Glu Ser Leu Val Ile Asp Arg Pro Arg Val Arg Lys Gln Thr Lys
 290              295              300
His Tyr Asn Ser Phe Glu Glu Asp Glu Leu Met Glu Phe Ser Glu Leu
 305              310              315              320
Asp Ser Asp Ser Asp Glu Arg Pro Thr Arg Ser Arg Arg Leu Asn Asp
      325              330              335
Lys Ala Arg Arg Tyr Leu Arg Ala Glu Cys Phe Arg Val Glu Lys Asn
      340              345              350
Leu Leu Ile Phe Gly Trp Gly Arg Trp Lys Asp Ile Leu Thr His Gly
 355              360              365
Arg Phe Lys Trp His Leu Asn Glu Lys Asp Met Glu Met Ile Cys Arg
 370              375              380
Ala Leu Leu Val Tyr Cys Val Lys His Tyr Lys Gly Asp Glu Lys Ile
 385              390              395              400
Lys Ser Phe Ile Trp Glu Leu Ile
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<210> 5281

<211> 336

<212> DNA

<213> Homo sapiens

<400> 5281

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120
aggcattcct ggtactcaca ggtctgacag ccacagttgg agacacagct atttcttcag
180
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240
aagttgcaca tgctctcacc aaacctggag cagatcacga ttgggaaaac ctagagaaaag
300
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336

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<210> 5282

<211> 91

<212> PRT

<213> Homo sapiens

<400> 5282

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Met Gln Thr Ala Gln Asn Lys Tyr Gln Glu Leu Lys Asn Ile Cys Ser
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Tyr Arg Ala Gln Ala Phe Leu Val Leu Thr Gly Leu Thr Ala Thr Val
      20              25              30
Gly Asp Thr Ala Ile Ser Ser Glu Lys Thr Gln Arg Met Ser Leu
      35              40              45
Met Arg His His Met Gly Gln Ser Leu Ser Lys Glu Val Ala His Val
      50              55              60
Leu Thr Lys Pro Gly Ala Asp His Asp Trp Glu Asn Leu Glu Lys Asp
      65              70              75              80
Leu Arg Leu Leu Ile Asn Gly Asp Tyr Glu Glu

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85

90

<210> 5283

<211> 1989

<212> DNA

<213> Homo sapiens

<400> 5283

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120
atggatggca tcattgaaca gaagagcatg ctggtgcaca gtaaaatcag tgatgtctggc
180
aagaggaatg gtttaattaa caccagaaac ttgatggccg agagcagaga tggctctggtg
240
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300
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360
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420
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<210> 5284

<211> 258

<212> PRT

<213> Homo sapiens

<400> 5284

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<210> 5285

<211> 2155

<212> DNA

<213> Homo sapiens

<400> 5285

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<211> 628

<212> PRT

<213> Homo sapiens

<400> 5286

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 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp
 565 570 575
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly
 580 585 590
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln
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<212> DNA

<213> Homo sapiens

<400> 5287

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 Arg Thr His Phe Val Leu Ser Pro His Cys Phe Met Gly Gly Ile Met

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 Cys Ser Asp Tyr Phe Cys Ala Met Phe Thr Ser Glu Leu Ser Glu Lys
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 Gly Lys Pro Tyr Val Asp Ile Gln Gly Leu Thr Ala Ser Thr Met Glu
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 145 150 155 160
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<400> 5290

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 35 40 45

Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr

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 <212> DNA
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 Ser Arg Gly Trp Ser Gly Gly Arg Gly Gln Pro His Pro Gly Gly Ala

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<212> DNA

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 5294

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Gln	Ala	Pro	Gly	Ser	Thr	Glu	Leu	Glu	Glu	Leu	Thr	Val	Gln	Val	Ala	20	25	30	
Arg	Val	Tyr	Asn	Gly	Arg	Leu	Lys	Val	Gln	Arg	Leu	Cys	Ser	Glu	Met	35	40	45	
Glu	Glu	Leu	Ala	Glu	His	Gly	Ile	Phe	Leu	Pro	Pro	Asn	Met	Gln	Gly	50	55	60	
Leu	Thr	Asp	Asp	Gln	Ile	Glu	Glu	Leu	Lys	Leu	Lys	Asp	Glu	Trp	Gly	65	70	75	80
Glu	Lys	Cys	Val	Pro	Ser	Gly	Gly	Ala	Val	Phe	Lys	Lys	Asp	Asp	Ile	85	90	95	
Gly	Arg	Arg	Asn	Gly	Gln	Ala	Pro	Asn	Glu	Lys	Met	Lys	Gln	Val	Leu	100	105	110	
Lys	Lys	Thr	Ile	Glu	Glu	Ala	Lys	Ala	Ile	Ile	Ser	Lys	Lys	Gln	Val	115	120	125	
Glu	Ala	Gly	Val	Cys	Val	Thr	Met	Glu	Met	Val	Lys	Asp	Ala	Leu	Asp	130	135	140	
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Tyr	Asp	Pro	Ile	Arg	Met	Glu	Phe	Glu	Asn	Lys	Glu	Asp	Leu	Ser	Gly	165	170	175	
Thr	Gln	Ala	Gly	Leu	Asn	Val	Ile	Lys	Glu	Ala	Glu	Ala	Gln	Leu	Trp	180	185	190	
Trp	Ala	Ala	Lys	Glu	Leu	Arg	Arg	Thr	Lys	Lys	Leu	Ser	Asp	Tyr	Val	195	200	205	
Gly	Lys	Asn	Glu	Lys	Thr	Lys	Ile	Ile	Ala	Lys	Ile	Gln	Gln	Arg	Gly	210	215	220	
Gln	Gly	Ala	Pro	Ala	Arg	Glu	Pro	Ile	Ile	Ser	Ser	Glu	Glu	Gln	Lys	225	230	235	240
Gln	Leu	Met	Leu	Tyr	Tyr	His	Arg	Arg	Gln	Glu	Glu	Leu	Lys	Arg	Leu	245	250	255	
Glu	Glu	Asn	Asp	Asp	Ala	Tyr	Leu	Asn	Ser	Pro	Trp	Ala	Asp	Asn		260	265	270	
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<211> 1451

<212> DNA

<213> Homo sapiens

<400> 5295

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1451

<210> 5296

<211> 133

<212> PRT

<213> Homo sapiens

<400> 5296

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35 40 45

Lys Asp Leu Ser Leu Ser Glu Asp Val Met Val Cys Phe Gly Asn Met
50 55 60

Phe Ile Lys Met Pro His Pro Glu Thr Lys Glu Met Ile Glu Lys Asp
65 70 75 80

Gln Asp His Leu Asp Lys Glu Ile Glu Lys Leu Arg Lys Gln Leu Lys
85 90 95

Val Lys Val Asn Arg Leu Phe Glu Ala Gln Gly Lys Pro Glu Leu Lys
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Gly Phe Asn Leu Asn Pro Leu Asn Gln Asp Glu Leu Lys Ala Leu Lys
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Val Ile Leu Lys Gly

130

<210> 5297

<211> 5318

<212> DNA

<213> Homo sapiens

<400> 5297

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360

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420

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<211> 663

<212> PRT

<213> Homo sapiens

<400> 5298

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Met Lys Pro Glu Glu Leu Val Gly Val Ser Glu Ala Tyr Glu Asp Ala
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Ala Asn Cys Leu Trp Leu Leu Thr Asn Ser Lys Pro Cys Ala Asn Cys
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Lys Ser Pro Ile Gln Lys Asn Glu Gly Cys Asn His Met Gln Cys Ala
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Lys Cys Lys Tyr Asp Phe Cys Trp Ile Cys Leu Glu Glu Trp Lys Lys
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Lys Lys His Lys Arg Phe Gln Glu Leu Asp Arg Phe Met His Tyr Tyr
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Thr Arg Phe Lys Asn His Glu His Ser Tyr Gln Leu Glu Gln Arg Leu
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Leu Lys Thr Ala Lys Glu Lys Met Glu Gln Leu Ser Arg Ala Leu Lys
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His Val Leu Leu Lys Thr Arg Arg Ile Leu Lys Cys Ser Tyr Pro Tyr
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260 265 270
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275 280 285
Cys Leu Val Gln Gln Lys Arg Gln Glu Phe Leu Ala Ser Val Ala Arg
290 295 300
Gly Val Ala Pro Ala Asp Ser Pro Glu Ala Pro Arg Arg Ser Phe Ala
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Gly Gly Thr Trp Asp Trp Glu Tyr Leu Gly Phe Ala Ser Pro Glu Glu
325 330 335
Tyr Ala Glu Phe Gln Tyr Arg Arg Arg His Arg Gln Arg Arg Gly
340 345 350
Asp Val His Ser Leu Leu Ser Asn Pro Pro Asp Pro Asp Glu Pro Ser
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<212> DNA
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<213> Homo sapiens

<400> 5300

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Gln	Phe	Ala	Met	Leu	Leu	Arg	Glu	Tyr	Arg	Leu	Gly	Leu	Pro	Ile	Gln
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Thr	Asp	Ser	Phe	Gly	Arg	Ile	Lys	Pro	Asp	Glu	Leu	His	Val	Gly	Leu
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<212> DNA

<213> Homo sapiens

<400> 5301

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<211> 1339

<212> PRT

<213> Homo sapiens

<400> 5302

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Ser	Gly	Leu	Pro	His	Val	Ala	Phe	Ser	Ser	Ser	Ser	Ser	Ile	Ser	Gly

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 Ser Ser Ser Asp Trp Val Thr Gln Tyr Arg Met Leu Tyr Ser Asp Thr
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 Pro Gly Asn Ile Asn Ser Asp Gly Val Val Arg His Glu Leu Gln His
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 Pro Ile Ile Ala Arg Tyr Val Arg Ile Val Pro Leu Asp Trp Asn Gly
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 Glu Gly Arg Ile Gly Leu Arg Ile Glu Val Tyr Gly Cys Ser Tyr Trp
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 Lys Thr Ser Glu Ser Glu Gly Val Ile Leu His Gly Glu Gly Gln Gln
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 Gly Asp Tyr Ile Thr Leu Glu Leu Lys Lys Ala Lys Leu Val Leu Ser
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 Val Met Thr Gly Ser Leu Leu Asp Asp His His Trp His Ser Val Val
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 Glu Ile Thr Phe Gly Gly Ile Pro Phe Ser Gly Lys Pro Ser Ser Ser
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Cys	Ser	Gln	Thr	Trp	Asp	Ser	Phe	Lys	Cys	Thr	Cys	Asp	Glu
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Pro	Val	Val	Gly	Tyr	Asn	Pro	Glu	Lys	Tyr	Ser	Val	Thr	Gln
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			20					25					30		
Ile	Lys	Ser	His	Arg	Cys	Leu	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
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<212> PRT

<213> Homo sapiens

<400> 5308

Met	Leu	Gly	Val	Gly	Ser	Glu	Glu	Leu	Thr	Gln	Gly	Arg	Asp	Gly	Ser
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Leu	Leu	Ile	Asp	Leu	Thr	Trp	Thr	His	Arg	Gly	Gly	Lys	Thr	Cys	Gly
		20						25					30		
Asp	His	His	Arg	Gly	His	Gly	Pro	Thr	Ser	Val	Ile	Trp	Glu	Thr	Gly
	35					40					45				
Leu	Gly	Arg	Gly	Gly	Asp	Phe	Pro	Lys	Ser	Pro	Ser	Ile	His	Asp	Arg
	50				55						60				
Gly	Arg	Ala	Trp	Glu	Leu	Gly	Thr	Gln	Gly	Ser	Ser	Lys	Arg	Ser	Arg
65				70				75					80		
Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
		85						90					95		
Phe	Pro	Pro	Pro	Trp	Thr	Leu	Cys	Phe	Glu	Leu	Phe	Cys	Leu	Pro	Asp
		100						105					110		

<210> 5309

<211> 2078

<212> DNA

<213> Homo sapiens

<400> 5309

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120
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180
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240
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300
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360
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420
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480
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540
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600
aatggtgaat atgcatggta ttatgaagga agaaatgggt ggtggcagta cgatgagcgc
660
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720
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780
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900
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960
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1020
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1080
agtcataggg gagaaggaga agaagatcat gaatcaccat cttcaggcag ggtaccagca
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1200
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1260
acagtacccg atcgatcaga tcgatcggga actgatcgat cagtagcagg ggggtggaaca
1320
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1380
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1500

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 1740
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 2078

<210> 5310

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5310

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Thr	Asn	Arg	Lys	Ala	Asn	Glu	Ser	Cys	Ser	Asn	Thr	Ala	Pro	Ser	Leu
	20						25						30		
Thr	Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val
	35						40					45			
Ser	Leu	Pro	Cys	Lys	His	Val	Phe	Cys	Tyr	Leu	Cys	Val	Lys	Gly	Ala
	50					55					60				
Ser	Trp	Leu	Gly	Lys	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu
	65				70					75				80	
Asp	Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala
			85						90					95	
Ala	Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn
			100					105					110		
Gly	Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala
	115						120					125			
Phe	Ser	Lys	Gly	Lys	Lys	Asn	Thr	Glu	Met	Leu	Ile	Ala	Gly	Phe	Leu
	130					135					140				
Tyr	Val	Ala	Asp	Leu	Glu	Asn	Met	Val	Gln	Tyr	Arg	Arg	Asn	Glu	His
	145				150					155				160	
Gly	Arg	Arg	Arg	Lys	Ile	Lys	Arg	Asp	Ile	Ile	Asp	Ile	Pro	Lys	Lys
			165					170					175		
Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
	180						185						190		
Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
	195						200						205		
Gly	Ala	Ser	Val	Gln	Pro	Leu	Val	Ser	Ser	Val	Arg	Pro	Leu	Thr	Ser

210 215 220
 Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser
 225 230 235 240
 Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn
 245 250 255
 Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser
 260 265 270
 Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr
 275 280 285
 Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala
 290 295 300
 Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln
 305 310 315 320
 Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala
 325 330 335
 Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg Arg Pro Asp Gly
 340 345 350
 Gln Cys Thr Val Thr Glu Val
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<210> 5311
 <211> 572
 <212> DNA
 <213> Homo sapiens

<400> 5311
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 120
 tgcgagctct gcaagtatga gttcatcatg gagaccaagc tgaagccact gagaaaatgg
 180
 gagaagttgc agatgacgtc cagcgagcgc aggaagatca tgtgtcagt gacattccac
 240
 gtcattgcca tcacatgtgt ggtctgggcc ttgtatgtgc tcattgaccg tctgtctgag
 300
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 360
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 420
 gtgcaattgt ggaagagact caaggcctat aatagagtga tctatgttca aaactgtcca
 480
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 540
 aaacatggat atggaatctg tcattccgac ac
 572

<210> 5312
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 5312
 Cys His Cys Glu Gly Asp Asp Glu Ser Pro Leu Ile Thr Pro Cys His

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Cys Thr Gly Ser Leu His Phe Val His Gln Ala Tyr Leu Gln Gln Trp			
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Ile Lys Ser Ser Asp Thr Arg Cys Glu Leu Cys Lys Tyr Glu Phe			
35	40	45	
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln			
50	55	60	
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His			
65	70	75	80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp			
85	90	95	
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu			
100	105	110	
Trp Pro Phe Trp Thr Lys Leu Val Val Val Ala Ile Gly Phe Thr Arg			
115	120	125	
Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp			
130	135	140	
Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro			
145	150	155	160
Glu Thr Ser Lys Lys Asn Ile Phe Glu Lys Ser Pro Leu Thr Glu Pro			
165	170	175	
Asn Phe Glu Asn Lys His Gly Tyr Gly Ile Cys His Ser Asp			
180	185	190	

<210> 5313

<211> 322

<212> DNA

<213> Homo sapiens

<400> 5313

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120

gtgcgcctcg ctctgctctg ctccgagaag cccacgcaca gcctgctgcy gaggatcgcc
180

cagcagctgc cccggcaaca caggcaattc cacgttgtgt gcgactggcc tgtgcatatg
240

gaggtgttca gtgacctggc cctggacact cctgctaaca ggacacacac atactctctt
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acacacatac atgtccacac ac
322

<210> 5314

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5314

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Thr Arg Val Leu Lys Gly Val Met Arg Val Gly Ile Leu Ala Lys Gly			
20	25	30	

Leu Leu Leu Arg Gly Asp Arg Asn Val Arg Leu Ala Leu Leu Cys Ser			
---	--	--	--

	35						40					45							
Glu	Lys	Pro	Thr	His	Ser	Leu	Leu	Arg	Arg	Ile	Ala	Gln	Gln	Leu	Pro				
50						55					60								
Arg	Gln	His	Arg	Gln	Phe	His	Val	Val	Cys	Asp	Trp	Pro	Val	His	Met				
65					70					75				80					
Glu	Val	Phe	Ser	Asp	Leu	Ala	Leu	Asp	Thr	Pro	Ala	Asn	Arg	Thr	His				
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Thr	Tyr	Ser	Leu	Thr	His	Ile	His	Val	His	Thr									
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<210> 5315

<211> 2298

<212> DNA

<213> Homo sapiens

<400> 5315

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 120
 gcatgtcccc gggcctccgt gaagggggcg gcggcggtta tggagatcgc gccgcaggag
 180
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 240
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 300
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 360
 gccagaatg tgaccgtgga cgaggtcatc ggcgcctaca agcaggcctg ccagaagctg
 420
 aactgcaggc agatcccaaa gctcctcagg cagctgcagg aattcacaga cctcgggcac
 480
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 540
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 660
 aacatctcct tcaacaagca catcggcacc cggggctggc aggcggccgc ccacatgatg
 720
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 960
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 1020
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<210> 5316

<211> 544

<212> PRT

<213> Homo sapiens

<400> 5316

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Gln	Lys	Leu	Asn	Cys	Arg	Gln	Ile	Pro	Lys	Leu	Leu	Arg	Gln	Leu	Gln
		20						25					30		
Glu	Phe	Thr	Asp	Leu	Gly	His	Arg	Leu	Asp	Cys	Leu	Asp	Leu	Lys	Gly
		35					40					45			
Glu	Lys	Leu	Asp	Tyr	Lys	Thr	Cys	Glu	Ala	Leu	Glu	Glu	Val	Phe	Lys

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 Arg Leu Gln Phe Lys Val Val Asp Leu Glu Gln Thr Asn Leu Asp Glu
 65 70 75 80
 Asp Gly Ala Ser Ala Leu Phe Asp Met Ile Glu Tyr Tyr Glu Ser Ala
 85 90 95
 Thr His Leu Asn Ile Ser Phe Asn Lys His Ile Gly Thr Arg Gly Trp
 100 105 110
 Gln Ala Ala Ala His Met Met Arg Lys Thr Ser Cys Leu Gln Tyr Leu
 115 120 125
 Asp Ala Arg Asn Thr Pro Leu Leu Asp His Ser Ala Pro Phe Val Ala
 130 135 140
 Arg Ala Leu Arg Ile Arg Ser Ser Leu Ala Val Leu His Leu Glu Asn
 145 150 155 160
 Ala Ser Leu Ser Gly Arg Pro Leu Met Leu Leu Ala Thr Ala Leu Lys
 165 170 175
 Met Asn Met Asn Leu Arg Glu Leu Tyr Leu Ala Asp Asn Lys Leu Asn
 180 185 190
 Gly Leu Gln Asp Ser Ala Gln Leu Gly Asn Leu Leu Lys Phe Asn Cys
 195 200 205
 Ser Leu Gln Ile Leu Asp Leu Arg Asn Asn His Val Leu Asp Ser Gly
 210 215 220
 Leu Ala Tyr Ile Cys Glu Gly Leu Lys Glu Gln Arg Lys Gly Leu Val
 225 230 235 240
 Thr Leu Val Leu Trp Asn Asn Gln Leu Thr His Thr Gly Met Ala Phe
 245 250 255
 Leu Gly Met Thr Leu Ser His Thr Gln Ser Leu Glu Thr Leu Asn Leu
 260 265 270
 Gly His Asn Pro Ile Gly Asn Glu Gly Val Arg His Leu Lys Asn Gly
 275 280 285
 Leu Ile Ser Asn Arg Ser Val Leu Arg Leu Gly Leu Ala Ser Thr Lys
 290 295 300
 Leu Thr Cys Glu Gly Ala Val Ala Val Ala Glu Phe Ile Ala Glu Ser
 305 310 315 320
 Pro Arg Leu Leu Arg Leu Asp Leu Arg Glu Asn Glu Ile Lys Thr Gly
 325 330 335
 Gly Leu Met Ala Leu Ser Leu Ala Leu Lys Val Asn His Ser Leu Leu
 340 345 350
 Arg Leu Asp Leu Asp Arg Glu Pro Lys Lys Glu Ala Val Lys Ser Phe
 355 360 365
 Ile Glu Thr Gln Lys Ala Leu Leu Ala Glu Ile Gln Asn Gly Cys Lys
 370 375 380
 Arg Asn Leu Val Leu Ala Arg Glu Arg Glu Lys Glu Gln Pro Pro
 385 390 395 400
 Gln Leu Ser Ala Ser Met Pro Glu Thr Thr Ala Thr Glu Pro Gln Pro
 405 410 415
 Asp Asp Glu Pro Ala Ala Gly Val Gln Asn Gly Ala Pro Ser Pro Ala
 420 425 430
 Pro Ser Pro Asp Ser Asp Ser Asp Ser Asp Ser Asp Gly Glu Glu Glu
 435 440 445
 Glu Glu Glu Glu Gly Glu Arg Asp Glu Thr Pro Ser Gly Ala Ile Asp
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<212> DNA
<213> Homo sapiens
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<210> 5318
<211> 132
<212> PRT
<213> Homo sapiens
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4487

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 65 70 75 80
 Pro Ala Ala Ala Ser Arg Arg Pro Cys Gly Ser Pro Ala Arg Gly Arg
 85 90 95
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 100 105 110
 Thr Cys Arg Arg Cys Arg Thr Ser Ala Trp Trp Trp Ala Trp Ser Ser
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<210> 5319

<211> 4231

<212> DNA

<213> Homo sapiens

<400> 5319

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1320
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